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LOUISIANA BUSINESS REVIEW

Louisiana State University,
Baton Rouge

Shelter in Louisiana

LETTER FROM THE EDITORIAL BOARD

No other purchase traditionally has commanded a larger percentage of the family's wealth, time, and effort as acquiring a house. The trend in residential construction since the end of the Second World War until recently has been homes of at least three bedrooms and ample yard space. The typical house dwellers were a family with two or three children who chose to pay 20 to 25 percent down and to finance the balance of a house's cost with a fixed-interest rate mortgage as the most standard form of financing. House style and construction were altered to adapt to such modern amenities as central air units, washers and dryers, and electric kitchens.

All areas of the housing industry, from construction to financing, have undergone drastic changes during the past decade, particularly in the past five years.This issue of the *LBR* includes three articles describing some of the changes which the housing industry, particularly in Louisiana, has experienced in the past few years.

The housing industry was a major victim of the recession, the worst the nation has experienced since the 1930s. Increases in interest rates, rising construction costs, the overall slowdown of the economy, the later age at which couples are marrying, and even the turning away from surburbia to a more flexible and travel-oriented lifestyle by younger couples, are among the reasons blamed for the severity of the downturn in the industry.

One of the first indications of the recovery of the housing industry from the recessional slump came in the first half of this year. The recent decrease in home mortgage interest rates to less than 13 percent led the industry into its largest number of housing starts in ten years; that is, to an annual rate of more than 1.93 million starts. The increase of new housing starts occurred even as construction costs continued to rise, which gave additional evidence to the argument that financial costs are a dominant factor in housing demand.

There exists a fear that the continued federal deficit and a tightening of the money supply by the Federal Reserve will push interest rates up once again, although not over the 20-percent peak of the late 1970s. The issue, however, is very complex, and no one can forecast future interest rates with certainty. Whatever fate awaits the housing industry through the next decade, it has experienced changes in the past five years that will likely remain an integral part of the industry for some time.

The major articles in this issue cover three areas within the thematic topic of *Shelter in Louisiana*. An overview of the housing market, with emphasis on the trends in the types and modes of shelter expected for the immediate future, is addressed in an article by John Duffy Jr., David B. Johnson, Richard B. McCaslin, and Joseph H. Wagner. The financial aspect, in the form of mortgage instruments, is discussed in an article by Charles L. Holley. James D. Shilling and D. Scott Laverty examine previous forecasts for housing needs, and then make some predictions of their own.

Duffy, *et al*, report Louisiana's housing industry performed better than the other states' during the recession. The authors also discuss the radical changes in the types of available shelter. Attached housing, condominiums, four-plexes, and manufactured housing have become dominant types of shelter on today's market. This article is likely to change the concept the reader has about the kinds of housing in which we are going to live in the future.

Holley points out that a trend to deregulate the savings and loan institutions and interest rate fluctuation have introduced alternative mortgage instruments to the standard fixed-rate mortgage (SFRM), predominate in this country since the 1940s. He discusses the pros and cons of some of these new instruments including the variable rate mortgage (VRM) and the graduated payment mortgage (GPM). VRM interest rates are tied to some reference index, such as the Consumer Price Index. The GPM maintains interest rates that are fixed throughout the life of the loan (as in the SFRM), but provides for a payment schedule of early payments generally lower than those of a SFRM, which gradually increase as the loan reaches maturation date.

The VRM and GPM, as well as the other mortgage instruments

described by Holley, indicate both lenders and borrowers in the housing industry view themselves as part of volatile economy. All of the new mortgage instruments discussed in Holley's article, with the exception of the GPM, are designed to allow for flexible interest rates, which are a clear indication that lenders and borrowers do not wish to be locked into any single rate in the face of current interest rate instability. The GPM is an indication the two agree on the increase in the cost of buying a home, and allows the borrower to defer part of the cost until a later date, when he presumably will have had time to absorb a large portion of the initial costs.

The 1980s have not produced the success which the housing industry experts had anticipated in the 1970s. Shilling and Laverty point to various causes which might explain the reasons why the optimistic forecasts of a decade ago have not materialized. A general mood in this country toward viewing housing, not as the once-in-a-lifetime investment it was once thought to be, but as a temporary shelter expense is responsible for the change, they report. The volatility of the interest rate, the increase in the divorce rate, and household changes in the attractiveness of owning versus renting, tend to confirm their arguments. The authors' projections reflecting the new socio-economic trends present less-optimistic figures than those previously reported.

—The Editorial Board

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The Editorial Board invites the submission of manuscripts to be considered for publication in this quarterly. Style sheets for manuscripts and manuscript abstracts are available upon request. Comments and suggestions on any material appearing in the *LBR* are also welcome.

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Upcoming Issues

Due dates for receipt of full manuscripts to be considered for publication in upcoming issues are:
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BOOK CORNER

The Complete Book of Word Processing and Business Graphics, Walter Sikonowiz, Englewood Cliffs, NJ: Micro Text Publications, Inc., 1982, 212 pages, $14.95 (paper).

The Complete Book of Word Processing and Business Graphics sets out to provide the reader with a detailed overview of not only word/information processing hardware and software concepts and capabilities but also computer graphics hardware and software uses. Word/information processing and computer graphics applications have had a significant impact on business decision making. Sikonowiz's book can help individuals with either a technical or nontechnical word-information processing and graphics background to produce effective documents and reports.

This book is divided into three sections. The first deals with basic concepts of word/information processing, computer fundamentals, mass storage, and networking. The second expands on the word/information concepts and includes a thorough presentation of specific hardware and software theory and application. The final section concentrates on both hardware and software requirements for the effective use of business graphics.

Sikonowiz presents the material logically and coherently. As new terms arise, he defines them, and the reader can also consult a comprehensive glossary for further understanding. In addition to the glossary, this book contains a brief bibliography and an exhaustive directory of manufacturers. The directory would benefit any reader interested in purchasing or finding more product information from the suppliers of word/information and business graphics hardware.

—Steven Golen

• U.S. Department of Commerce, Minority Business Development Agency, *Guide to Federal Minority Enterprise and Related Assistance Programs*, (Washington, D.C.: U.S. Government Printing Office, 1982), 144 pp., not for sale, available from issuing agency or a local federal depository library.

This is a guide to federal programs supporting minority business development. Each program is described, application procedures explained, and offices to contact listed. Programs include direct funding, management or technical assistance, contract opportunities, guaranteed loans, etc. A handy list of Minority Business Development Centers and other related federal offices are included at the end of the publication.

• U.S. Small Business Administration, Office of Advocacy, *Directory of Business, Trade, and Public Policy Organizations*, (Washington, D.C.: U.S. Government Printing Office, 1982), 134 pp., not for sale, request from issuing agency or use at a local federal depository library.

• A list of over 1,000 trade and business organizations in the U.S., classified by industry. Included for each organization are the name of the executive director, address, telephone, approximate size of membership, and SIC number. At the end are listings of national, state, and regional small business organizations and public policy groups. An alphabetical index of organizations is provided.

• U.S. Congress, Office of Technology Assessment, *Automation and the Workplace: Selected Labor, Education, and Training Issues*, (Washington, D.C.: U.S. Government, Printing Office, 1983), 105pp., $5.50 (stock no. 052-003-00900-5).

A major issue currently facing American business is the growing automation of the workplace and how this will affect its relationship with organized labor. This technical memorandum examines in detail the employment changes brought about by automation and the problems associated with these changes. It discusses automation and technology in terms of its effects upon the American labor market and work environment, as well as its impact on the education, training, and retraining of workers in manufacturing industries. The publication is particularly timely in light of the growing number of displaced workers in traditional industries such as automobiles and steel in the United States.

• U.S. Department of Labor, Labor-Management Services Administration and Bureau of Labor Statistics, *Labor-Management Cooperation: Recent Efforts and Results*, (Washington, D.C.: U.S. Government Printing Office, 1982), 136 pp., $6.00 (stock no. 029-001-02744-3).

With the recent inroads being made by other countries into American industry's traditional share of world markets, there has been an increasing need to find ways for America to continue to compete in the world economy. One way has been to examine recent efforts at labor-management cooperation, as in this wide-ranging collection of writings originally published in the *Monthly Labor Review*. This work focuses on three main areas: the problems of the workplace, recent developments in labor-management cooperation in the United States, and efforts at improving worklife in other countries. The major theme of the essays is that American business

must place more emphasis on meeting workers' needs. They argue that only through new, more flexible alliances between management and labor to restore industrial productivity and more efforts by business addressing the *quality of worklife* among American workers will the United States be able to compete with rising economic powers such as Japan.

—Louis Vyhnanek

Technology Transfer, Productivity, and Economic Policy by Edwin Mansfield, Anthony Romero, Mark Schwartz, David Teece, Samuel Wagner, and Peter Brack, (New York: W. W. Norton & Co., 1982), 233 pp., $35.50 (hard).

In light of the recent recession and the national productivity declines, *Technology Transfer, Productivity, and Economic Policy* is a timely book which explicates the relationships between innovation, international technology transfer, and productivity.

It is generally accepted that economic development is predicated on technology transfer and innovation. Therefore, understanding the nature and rates of technology transfer becomes important. Mansfield, *et al*, have found a rapidly accelerating rate of international technology transfer. Between the years 1960-68, they noted that 27 percent of transferred technologies were less than five years old; while 75 percent were less than five years old between 1969 and 1978. They also found that those nations with large research and development expenditures were the first to receive transferred technologies.

One's initial reaction to this situation might be to limit the export of U.S. innovations; however, the authors point out that decisions to invest in research and development (R&D) by U.S. firms increasingly are based on potential foreign returns. In fact, they discovered that limiting the exportation of technologies could reduce U.S. (R&D) efforts by 20 percent. The authors also estimate that U.S. technology transfers contribute 1 percent to the total non-U.S. world economy, and therefore play a very significant role in the international economy.

The authors stress numerous policy recommendations. Although statistics do not seem to bear out that there has been a reduction in the rate of innovation in this country, expert opinion appears to lean in this direction. If it is accepted that productivity is related to innovation, then government should take an active role in promoting research and development efforts of domestic firms. Some suggested guidelines for such government involvement include:

1. Any program should be selective, diverse, and flexible;
2. Programs should not focus on non-competitive industries;
3. Government intervention should be incrementally reduced, as the research and development effort approaches commercialization;
4. Goverment should facilitate the interfacing of end users with research and development activities; and,
5. R&D programs be decentralized.

Additional areas of policy concern are the general inducements for investment, regulatory environment, and microeconomic policies (particulary in relation to inflation); all of which tend to inhibit R&D efforts

This book will be of interest to those readers interested in the public policy implications of U.S. R&D, and its impact on the domestic and international economies. Mansfield, *et al*, have produced an extensive and comprehensive work in a concise fashion. The topical area of the book is broad and attempts to add to your understanding of the total process and impact of technological change. This is no minor task, and the authors are successful in carrying it out. They also have taken the critical step of assimilating a large amount of information and developing a normative prescription based on that evidence

—Charles Holbrook

The Woodbook 83, (Seattle, WA: Avery-Phares, Inc. 1983), $18.00 (hard).

This book is a complete source of information on wood products. It contains a wide range of information on lumber, particleboard, plywood, shakes, and specialty products such as siding and paneling. Specifications, span tables, coverage rates, and application information for all types of products are offered for easy reference.

The Woodbook 83 is divided into two major sections, trade association information followed by manufacturer's product information. The table of contents lists the data by association and manufacturer, then by product, and finally by the title of each informational brochure in the order in which it appears. A cross reference index is included in the back of the book.

The information and recommendations contained in *The Woodbook* have been developed by the association and manufactuers. More than 54,000 copies have been distributed to architects, builders, engineers, general contractors, and remodelers. Copies are available through *The Woodbook*, 157 Yesler Way, Suite 317, Seattle, WA 98104.

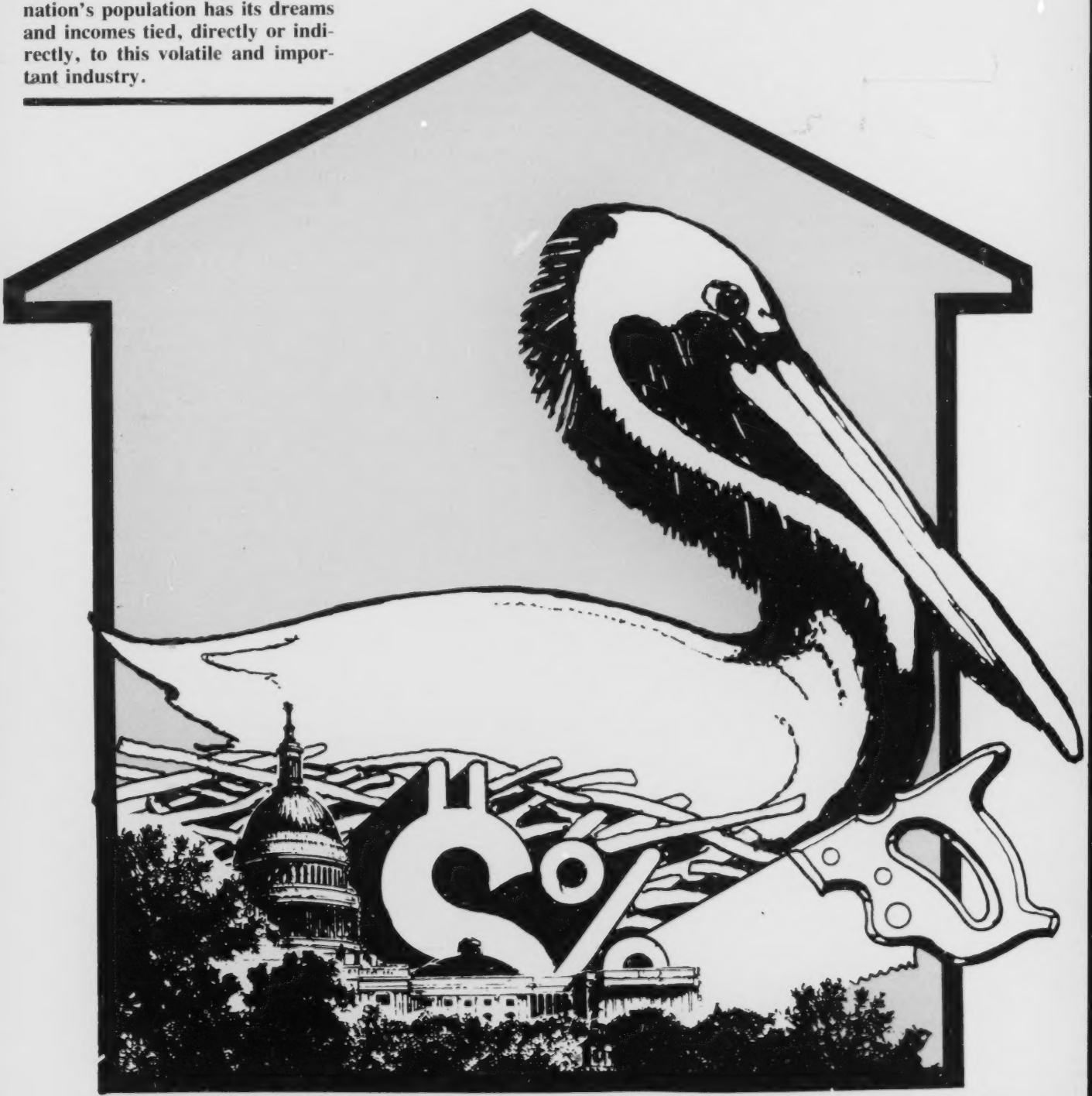
—J. H. Wagner

STEVEN GOLEN is chairman of the College Department of Business Communications and Office Systems; CHARLES HOLBROOK is director of the LSU Economic Development Center; LOUIS VYHNANEK is business librarian at the Troy H. Middleton Library; and J. H. WAGNER is managing editor of the LBR. ■

John Duffy Jr., David B. Johnson, Richard B. McCaslin and Joseph H. Wagner

Residential Shelter in Louisiana

The residential construction industry provides homes for people, and a livelihood for suppliers, builders, laborers, realtors, salesmen, architects, and attorneys. It is one of the largest sectors in the American economy, directly accounting for approximately 4 percent of the gross national product. Furthermore, most of the nation's population has its dreams and incomes tied, directly or indirectly, to this volatile and important industry.



The housing industry is rebounding from the 1980-81 recession, despite some recent increases in mortgage rates. A 19-percent increase in inflation-adjusted spending on United States housing for 1983, was predicted by the United States Department of Commerce in December 1982; however, in mid-1983 the agency announced it expected the domestic housing industry to grow by 31.5 percent during the year. Other sources estimate increases from 40 to 60 percent for 1983; but, in the face of recent cost increases, these optimistic forecasts might be dampened.[1]

One of the most important costs in home ownership is the interest rate applicable to its financing. Rising mortgage rates caused the housing industry to be hit early by recessionary conditions. The number of single-family residential housing starts had averaged approximately 1.4 million between 1974 and 1979 (in 1978 they numbered a high of 1.8 million); then, in 1980, as interest rates increased, housing starts fell sharply to 1.2 million, and a low of 986,000 in 1981. A slight increase to 1 million starts were recorded for 1982.[2]

Interest rates decreased in 1982, and housing starts increased significantly. However, in June 1983, the VA-FHA mortgage rate for single-family units was increased from 11.5 percent to 12 percent. This was the first increase following sixteen months of steady declines. Subsequent increases resulted in an August (1983) mortgage rate of 13 percent.

Other costs associated with residential construction also have been increasing during 1983. Nationwide construction costs climbed .8 percent in the first quarter of 1983 and 2.17 percent during the second quarter. This made the increase in construction costs during the first half of 1983 equal to 2.97 percent, a higher rate than for all 1982. Residential construction costs increased at a faster rate than did the commercial sector, primarily due to a rapid growth in the cost of lumber.[3]

New Orleans Shows Cost Rise

The rise in residential construction costs varied greatly among cities during the first half of 1983. *Marshall and Swift Publications* reported that Phoenix experienced the lowest rate of increase in costs (1.2 percent); and Tampa, the highest (8.6 percent). New Orleans, which was the only Louisiana city reported, had an 6.9-percent increase in construction costs during the first six months of the 1983 reporting period.[4]

As of mid-1983, loss increases appear not to have resulted in a significant slowdown in house building. Housing starts were down slightly in June, but housing permits were up 6.7 percent to an adjusted annual rate of 1.7 million. During the first six months of this year, 805,000 housing starts were recorded in the nation. This represented an increase of 78.7 percent over the first six months of 1982. The South recorded 457,000 starts for the first half of 1982, representing 57 percent of the national market.[5]

Louisiana's construction industry including residential construction did relatively well during 1982. While

TABLE 1
Total Value of Building Permits
in the First Seven Months of 1982 and 1983
(in millions)

	Residential	% Change
LOUISIANA		
1982	$375.9	
		74.7%
1983	$656.6	
MSAs		
New Orleans		
1982	$115.0	
		110.9%
1983	$242.5	
Baton Rouge		
1982	$ 51.1	
		102.4%
1983	$103.4	
Alexandria		
1982	$ 6.1	
		52.6%
1983	$ 9.3	
Shreveport		
1982	$ 35.3	
		74.4%
1983	$ 61.5	
Lafayette		
1982	$ 52.6	
		124.8%
1983	$118.3	
Monroe		
1982	$ 10.6	
		79.4%
1983	$ 19.1	
Lake Charles		
1982	$ 19.4	
		– 4.8%
1983	$ 18.5	

Source: U.S. Dept. of Commerce

the value of total construction in the state was up nearly 50 percent in 1982, as compared with 1981. The national average was about the same as in 1981. The 1982 statewide spurt continued into 1983. The dollar value of residential building permits in Louisiana was $656.6 million in the first seven months of 1983. This represents a 75-percent increase over the first seven months of 1982.[6]

The early 1983 indicator of economic recovery apparently provided a solid boost to residential and nonresidential construction activity throughout Louisiana. This growth, however, failed to show up in other sections of the economy, such as state construction employment. The Louisiana Department of Labor reported a decline in employment of 10,600 workers in the industry for July 1983, as compared to July 1982.[7]

A dramatic statewide increase in residential building permits in early 1983 indicates there should be increased construction employment in future months, as contract awards increase. Breaking down the Louisiana construction permit activity by MSA yields the following summaries for South and North Louisiana.

South Louisiana

Residential building permits in the New Orleans MSA soared by 110.9 percent in the first seven months of 1983, as compared with the same period in 1982. The continued development of New Orleans East, as well as the surrounding parishes, appears to account for at least some of the rapid increase in residential construction permits.

Baton Rouge residential building permits jumped 102.4 percent during the first seven months of 1983, as compared with the similar period in 1982. The pace of residential permits in East Baton Rouge Parish accelerated in July 1983, when 450 permits were issued for $13.8 million, compared with a year earlier, when only 198 permits were issued for $2.9 million. Based upon this data, Baton Rouge also is experiencing a residential construction *boom*, although its unemployment rate of 10.5 percent (which is above the national average) is higher than the 9.5 percent for July 1982.[8]

Lafayette experienced sharp growth in residential building permits in the first seven months of 1983. Compared with the same period in 1982, 1983 residential building permits rose by 124.8 percent, reflecting the *tight* housing market caused by the population growth experienced there in the past several years. The recent decline in *oil patch* activity in the Lafayette area, however, can be expected to dampen the growth of residential construction in that market. The Lafayette unemployment rate—lowest in the state—increased from 5.2 percent in July 1982, to 8.5 percent in July 1983.

Lake Charles has been hit hardest by the 1980-82 recession, and has the highest unemployment rate—15.2 percent—of any metropolitan area in the state. The recent economic problems of this area are reflected in a 4.8-percent decrease in residential building permits during the first seven months of 1983.

North Louisiana

Alexandria experienced moderate growth in residential building permits through July 1983. Residential permits increased 52.6 percent, as compared with the first seven months of 1982. Alexandria's unemployment rate of 12.2 percent is considerably above the national average but slightly below the state average of 12 percent.

Monroe has shown a positive growth in residential construction. Residential building permits increased 79.4 percent during the first seven months of 1983, as compared with the first seven months of 1982. Monroe's unemployment rate has fallen within the past twelve months, providing additional optimism for residential construction in that area.

Residential building permits in the Shreveport MSA for the first seven months of 1983 increased 74.4 percent over the same period in 1982. Residential construction growth there has not been as strong as most other Louisiana MSAs. This is reflected in construction employment, which fell by 1,300 workers—a 14.6-percent decrease—between July 1983 and July 1982. The Shreveport area also experienced the state's largest increase in unemployment rates for the same reporting period, from 9.7 percent to 11.9 percent.

Home Builders VP Interviewed

The *Louisiana Business Review* interviewed Charles G. Stoma, president of the National Association of Home Builders (NAHB) Executive Officers Council and executive vice-president of the Louisiana Home Builders Association, to obtain an informed opinion on Louisiana construction activity.

LBR: *"Federal and private economic reports suggest the Louisiana construction industry did not fare too badly in 1982, and they make some very positive forecasts for 1983. Would you elaborate on the statewide situation?"*

Stoma: "In 1982 homebuilding construction, both single- and multifamily, was in its fourth year of decline in this state, as well as across the country. This situation largely was due to high interest rates and the inflationary spiral. We began to

come out of the decline early in 1983, and we had very good months in March, April, and May; however, when I say *good*, you have to appreciate that any kind of increase in housing starts and sales is exciting to us.

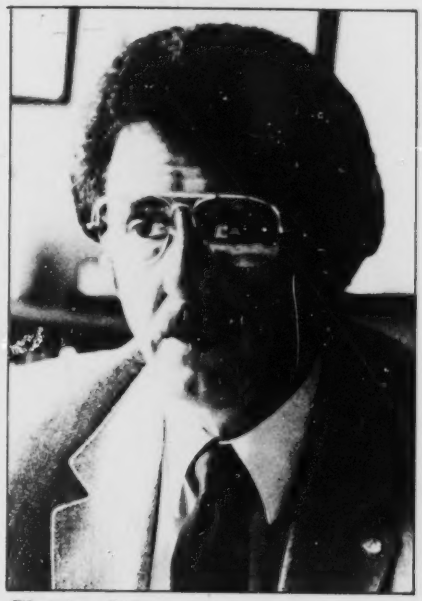
"Unfortunately, during June and July, the industry tapered off, with sales dropping off some 35 percent from the earlier figure. I think we will see that the July picture will be about the same. As VA and conventional rates tend to inch up again, the decrease will continue statewide, although probably one of the first areas to feel this drop in sales will be Lafayette, which has been the state's traditionally strong market."

LBR: *"What is the current trend in Louisiana homebuilding?"*

Stoma: "We are seeing that, as the interest rates go up, FHA, VA, and conventional rates follow. The Federal Reserve Bank is retightening its monetary policy, and we in the homebuilding industry are suffering the resultant effects. Home sales have dropped off sharply in the Baton Rouge, Lafayette, Monroe, New Orleans, and Shreveport markets. I believe the same is true for Alexandria and the Central Louisiana area. A number of builders are having to retighten their belts, after enjoying the short, three-month surge in homebuilding."

LBR: *"How do you perceive the industry's immediate future?"*

Stoma: "The problem with the building industry is that it all hinges on the policies of the Federal Reserve Bank; and—probably to the surprise of a lot of people—our future, unfortunately, is also determined by international monetary flows, which has an impact on our domestic interest rates. The availability of credit is the key to the survival of the homebuilding industry, and, so far as I'm concerned, to the survival of our economic system.



Charles Stoma

"The federal government commands about 46 percent of the credit market. This means that whatever amount of money is available for credit, businessmen must compete with our national government for every dollar, which drives up interest rates in times of high governmental deficit spending.

"I believe that if the federal government reduced its deficit spending, the homebuilding industry would lead the country out of its present recession. The multiplier effect of building a home, and the jobs that it supports, is phenomenal.

"Many people do not understand the nature of this organization. We call ourselves the Homebuilders Association, but among our 3,000 members, are many plumbing, electrical and painting contractors; banks and other lending institutions; floor-covering, lighting fixture, and furniture dealers; attorneys to close loans; realtors to sell homes—anybody who has anything to do with the building of a house. I guess that if you eliminated all those jobs you would see that the housebuilding industry has a very significant impact on the economy."

LBR: *"You very strongly emphasized the tight relationship between the housing industry and the credit market. What are some other factors in the industry?"*

Stoma: "A builder today, versus a builder thirty or forty years ago, is an entirely different breed. Forty years ago the builder physically went out and built the house. We had to have construction and supervisory skills. Today a builder has to be a planner and a good money manager, or he'll be forced out of business. He cannot control five costs: land, labor, materials, interest on the money he has to borrow, and, unfortunately, the cost of local, state, and federal government regulation of his industry.

"Allow me to cite you a national statistic: 26 percent of the cost of building a house in this country, according to a nationwide study by the NAHB, is attributed to government regulations. Since we cannot control these and many other costs, today's builder has got to very adept at other things. He's got to be able to plan a project and know where and how to buy land at the right price. He has to have efficient and reliable supplies of materials, and be able to control the time it takes to build that house."

Zero-Lot Lines

LBR: *"What are some recent trends in homebuilding in Louisiana?"*

Stoma: "One of the most costly factors in the development of land and the building of a house is the front footage allowed for each house lot. If you have a two-hundred-foot lot fronting on the street, that is an expensive lot, even if it is only fifty feet deep. One of the things being done to decrease costs is reduction of the front footage of residential lots.

"The concept of *zero-lot line* has developed. We are building houses in Baton Rouge, as well as in most other parts of the country on 35- or 40-foot-wide lots. These are called *zero-lot lines* because the house is built anywhere from *six inches to a foot* off the side property line. You will have four feet of yard on one side of the house, but, on the other side, it is virtually butting against the lot line. The houses are similar to the old row houses, beautiful homes, but narrow and deep. That is one factor that will cut down on future housing.

"Another obvious factor is the reduced square footage of the heated and cooled areas of the house. During the 1970s the average house size was about 1,900 square feet. Now we are building houses in the 1,100- to 1,300-square-foot range, with three bedrooms, and two-and-a-half baths. An extreme example is a builder in the Northwest who developed a 876-square foot, two bedroom, one-and-a-half bath house, loaded with amenities, with a selling price, I believe, in the high $40s.

"We are cutting down on the square footage, but putting all of the amenities in, because that is what the public demands. People do not want a *bare-bones* house, they want a garbage disposal, a garbage compactor, an ice maker, and a microwave oven built in above the oven. We continue to provide the amenities, although at some point we will have to start reducing these because the builder will face a higher per-square-foot cost as the price of materials rises."

LBR: *"Is the two-bedroom home coming back?"*

Stoma: "The two-bedroom house is coming back strong. A number of them are being built in Baton Rouge, Lafayette and New Orleans right now. Among the reasons behind this trend is that a lot of young singles have realized the value of home ownership and are starting to invest in a home. Also, many young married couples have made a decision not to have children for a long time, if at all. Consequently, the demand for larger homes is decreasing.

"An important nationwide market is housing for the elderly. Older people often do not need nor want large homes or yards to keep, and they are looking for a basic house similar to those they started with in the 1940's. Two-bedroom houses are back to stay."

LBR: *"Are these two-bedroom houses being constructed with a possibility for later additions?"*

Stoma: "A lot of them I've seen are built to take a second story. These are called *expandable homes*, and are a thing of the future. I must stress that there are people who can still afford bigger homes, and there are still contractors out there who are successfully building 3,000-square-foot custom homes."

LBR: *"What about renovators and contractors who are remodeling older* homes?"

Stoma: "Business was so bad in 1981 and 1982 that some of our members had to go into the remodeling and renovation market to survive. I've talked to some builders around the state who have done so well in the remodeling business that they remained in it, instead of returning to single-family development. I've heard others who said just the opposite: 'No, I still love to stick-build a house, so I am going back to basic construction.' They are both good markets, and remodeling represents a feasible good alternative for people who cannot buy a new home because of high prices or high interest rates."

LBR: *"Are apartments and other multi-family rental units being built more often?"*

Stoma: "Louisiana apartment construction was probably a little stronger last year. It has tapered off, and is quite soft right now. The recent increase in interest rates has been responsible for the softness in apartment construction."

LBR: *"Do you see an impact on your industry from mobile, or* manufactured, housing?"

Stoma: "No question about it. Mobile homes have been available a long time, and they appeal to a certain group of people who cannot afford a stick-built house or a stationary home on a lot. The mobile home market has become stronger over the past four or five years because of the homebuilder's plight and the high interest rates. It is one of the alternatives that is open and attractive to a segment of the population."

LBR: *"Do you see that segment growing in time?"*

Stoma: "Yes, I think it has grown in the last three or four years, but it will taper off as the homebuilding industry recovers and financially becomes more easily available. It is the traditional house that will appeal to the average American."

H. M. Favrot

Len Greene

LBR: *"What about condominiums?"*

Stoma: "Condominiums are going to be important in Louisiana's future; however, at this time they have not caught on here like they did in Florida and some other states. Of course, Florida had a bad experience with an overbuilding of *condos*.

"Although not in great demand in Louisiana, there are some fine condominiums in New Orleans, Lafayette, and Baton Rouge. I cannot tell you why they have not gained wide public acceptance here, but *condos* will become more popular in Louisiana in future years."

Architects' President

H. M. Favrot is president of the Louisiana Architect's Association, and a partner in the firm of Favrot and Shane at Metairie. The *LBR* interviewed him about trends in Louisiana homebuilding design.

LBR: *"What is the current trend in home design?"*

Favrot: "There is a trend toward attached housing, townhouses, and condominiums. This is an inevitable result of the high costs of land and construction. Homes are becoming more compact, but they are containing many more features and amenities. Part of the attraction of townhouses and condominiums is that they often provide more recreational amenities, such as swimming pools and tennis courts."

LBR: *"Where are the trends in housing design established?"*

Favrot: "California is probably the leading state in design and quality of construction. The professional publications show that most of the leading designs come from California, Texas, and Florida."

LBR: *"Are housing designs becoming more standardized throughout the United States?"*

Favrot: "One unfortunate result of central air-conditioning is that it has reduced the number of houses designed for particular regions. Whereas, seventy-five years ago the Louisiana house was designed for the climate with big overhangs, high ceilings, and floor-to-ceiling french doors that stimulated air flows, air-conditioning has relieved the need for such regional design. This is sad because regional design expresses a way of life that we have here, as opposed to other parts of the country. Consequently, climate control has caused houses built in various parts of the country to resemble one another. Almost all new housing in the United States is becoming standardized because of air-conditioning."

Apartments Are for Tax Losses

Len Greene is president of the Baton Rouge Apartment Owners Association. The *LBR* interviewed him to explore recent develop- ment in apartment building.

LBR: "What is the potential for new construction of apartments in Baton Rouge?"

Greene: "We have some being built, but in many cases, they cannot be supported by strict economics. It appears that the primary motivation for investment in apartments is the tax incentive. If you are in a high tax bracket, and you are looking for some tax losses, the apartment business might offer an opportunity."

LBR: *"Does this apply to Louisiana?"*

Greene: "Well, I am more familiar with Baton Rouge, but I believe it is true throughout the state. Many people create syndicates to allocate the tax losses to one or two individual members. There is some money to be made in apartment managment, but the real profit from owning an apartment complex comes five to ten years down the road, when the apartment unit is sold. If you put in $100, expecting $110 back next year, it's not going to be there."

LBR: *"Approximately how many apartment units are under construction in Baton Rouge?"*

Greene: "There were around 200 permits issued per month for new units in Baton Rouge between Janu-

ary and June of 1983. I believe all of the permits were issued for duplexes, four-plexes, and even eight-plexes. No permits were issued for single structures of 100 or more units.

"Three or four years ago we hardly knew what a four-plex was in this town. There were a few existing then, but for practical purposes they were not significant. That situation has changed and duplexes and four-plexes are very important now. The change began when *Fannie Mae* (Federal National Mortgage Association) began to lend money for the construction of four-plexes. Many investors were attracted to jump on the four-plex bandwagon because of the availability of credit for these units, the high price of land caused by the shortage of developed land in this area, tax advantages, and lower capital requirements."

LBR: *"Will apartment construction increase significantly if interest rates begin to decline again?"*

Greene: "I don't know for sure. Anytime money is available at reasonable rates, whether there is a demand or not, investors will borrow the money and build apartments. This seems to be the basic attitude of those investing in apartments. It's not whether the town is overbuilt, or whether there is a need for new apartments. The really important question appears to be: 'can I get that money?'"

Manufactured Housing

Manufactured housing, has been responsible for a quiet revolution during the last several decades. Manufactured housing provides the most practical alternative for home ownership for many Louisiana families. There does not appear to be a commonly accepted definition of manufactured housing. There is general agreement, however, that the old-fashioned rectangular shaped metal box on wheels known as a mobile home is no longer the typical manufactured house. Not only has the mobile home been changed drastically to look more like a conventional home, with rising roofs, traditional siding, but there are now multi-wide mobile units which are permanently connected.

Manfactured housing also includes pre-cut components, or even entire walls, floors and roofs which are put together in a factory and then assembled on the permanent home site. Modular homes are assembled on the home site from a set of factory assembled rooms that are delivered to the site.

According to the Manufactured Housing Institute, partially-built or completed manufactured housing, including both mobile and conventional homes with manufactured components, modules, sections and pre-cuts, accounted for 90 percent of all residential housing units produced in the United States during 1981. The mobile home market, by itself, is considerable. According to the U.S. Department of Commerce, the total number of new, one-family homes sold in 1982 was about 430,000; whereas the number of mobile homes shipped was 250,000.

Typically, the new generation of manufactured housing costs about 25 to 40 percent less than comparable site-built houses. The United State Department of Commerce recently reported the average price of a new single family home has topped $83,000. By contrast, the average price of a new mobile manufactured home, excluding the cost of land, was about $20,000, according to the Manufactured Housing Institute.

Another cost comparison is the average square footage cost. The average square footage cost of a site-built home was approximately $40 in 1982, according to the National Association of Home Builders. This compares with an average per-square-foot cost for a mobile/manufactured home of about $19. The reason for the wide difference lies in the fact that factory production is more efficient and cost effective than site-building, and the manufactured home builder is able to buy materials in large quantities.

One of the most significant factors responsible for the growing popularity of mobile homes is the increased availability of funds to finance them. Prior to 1969, mobile homes had to be financed with short-term loans very similar to automative loans. In 1969, the Federal Home Loan Bank Board permitted financial institutions to make mortgage loans for mobile homes. The institutions, however, had limits on the amount of funds they were willing to invest in these mortgages, and they were limited to twelve years.

In 1973, FHA and VA loans were permitted for mobile homes, and during the rest of the decade, many of the institutions were eliminated. The maximum loan amount for a mobile home is equal 90 percent of total cost and, since 1981, *Fannie Mae* has been purchasing manufactured home mortgages. Mobile homes must be occupied by their owners, must have the wheels removed, be permanently attached to the site, and be taxed as realty.

A total of 474 financial institutions, representing 5,716 operating locations, reported doing business in manufactured home consumer financing in 1982. There were a total of 1.1 million manufactured home consumer loans listed, with a gross dollar volume of some $20 million.

Gary Canning regional manager of Greentree Acceptance Corporation, a national lending institution for manufactured housing, which has recently opened an office in Baton Rouge,

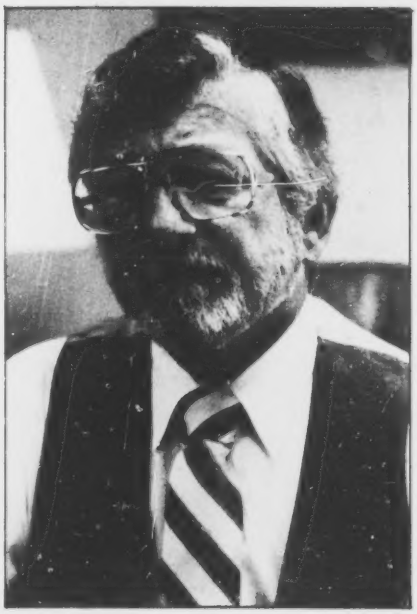
was interviewed by the **LBR.**

"Is the manufactured home industry important in Louisiana?"

Canning: "I have not seen the figures for 1983, but in 1982, Louisiana was third in the nation in total sales of manufactured housing. The state even surpassed California, which had been the number one state for many years. Despite the high interest rates of last year, and in spite of the economic and employment conditions, the industry has done well here. Georgia, Florida and the Carolinas are also very good markets.

"Unlike some other states, Louisiana has an abundance of local money available for financing manufactured homes. Louisiana National Bank is very strong in mobile home lending; Fidelity National Bank, to some extent; and Capital Bank and Trust is very strong in government mobile home lending. Others include Troy and Nichols Mortgage Corporation, Bossier City Bank and Trust, Guaranty Bank of Lafayette, Calcasieu Marine Bank of Lake Charles, and several other local institutions.

"These all make Louisiana a very competitive state in which to do business; however, despite the availability of mobile home financing, we soon will see many more national lenders coming into the state. In addition to Greentree, we already have General Electric Credit Corporation (GEEC), City Corp, and BarclaysAmerica. It's a great market."



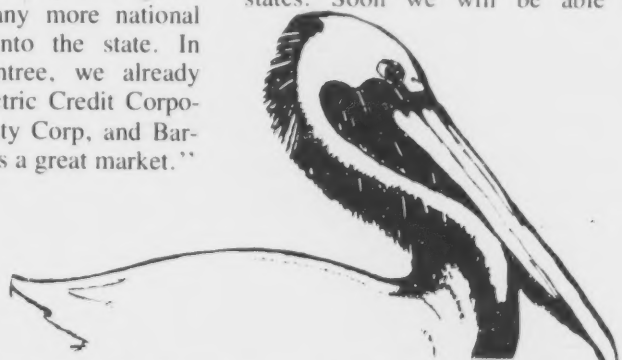
Gary Canning

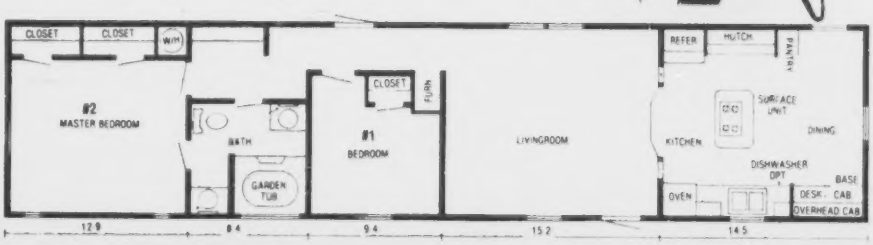
LBR: *"What direction do you see the manufactured housing industry taking in Louisiana?"*

Canning: "I believe you will see that the manufactured house will be the primary new home for the average American in the near future. Not only are there cost advantages with manufactured housing, but we are witnessing the evolution of financial institutions to service this market. It used to be impossible to obtain a packaged loan for the manufactured house and the land. Now, for example, Greentree has a land and home program which it is testing in other states. Soon we will be able to finance the total package including both home and lot."

LBR: *"To what do you credit your industry's success?"*

Canning: "Manufactured housing has come to represent the affordable home. The industry has made great strides in the past five years, but our greatest problem is convincing the public about the high quality of our product. Manufactured housing has been built under very stringent HUD conditions since 1965. It is not a trailer any more, but a well-built home offering many conveniences at an affordable price."





Professor DAVID B. JOHNSON is director of the LSU Division of Research and Development, JOHN B. DUFFY JR. is a research associate in the Division, JOSEPH H. WAGNER is LBR managing editor, and former LBR staffer, RICHARD B. McCASLIN is a doctoral candidate in U.S. diplomatic history at the University of Texas. ■

ENDNOTES

[1]William J. Kahley, *"Louisiana: Thermostat Setting Lower,"* **Economic Review,** Federal Reserve Bank of Atlanta, February 1983, p. 46.

[2]Kahley.

[3]*"A Case of Nerves in the Credit Market,"* **SF Newsletter** (New Orleans: Southern Forest Products Association, June 13, 1983).

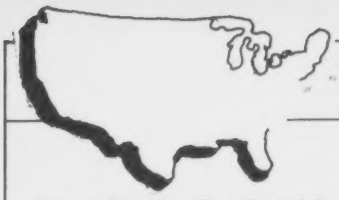
[4]Richard Vishanoff, senior research analyst, **Marshall and Swift Index,** (California: Marshall and Swift Publications, Summer 1983). The Index is based on a weighted national average of all types of buildings from district indexes. These basic indexes are further divided into five classes of construction for fifty-nine major metropolitan cities throughout the districts. Twelve material items, local sales taxes and six labor wage rates are combined as found in a composite building typical of each class of construction. These are additionally weighted for variations such as the cost of construction money and the general status of the economy at the time of computation.

[5]Kahley.

[6]Kahley.

[7]*"Louisiana Labor Market Information,"* Louisiana Department of Labor, May 1983, p. 3.

[8]New Orleans also is experiencing a boom—in terms of buildings under construction, the Crescent City is one of the fastest growing metropolitan areas in the country.



NATIONAL NEWS

Bank Decline Predicted by Study

A severe decline in the number of U.S. banks, from 15,000 in 1980 to only 9,600 in 1990, is predicted by a recent study co-sponsored by Arthur Andersen and Company and the Bank Administration Institute. Small banks, those with less than $100 million in assets, will experience the greatest decrease, some 41 percent, falling from 13,000 to less than 7,800 during the decade. Industry assets will shift to banks with more than $1 billion in assets, increasing their share from 53 percent in 1980 to 65 percent in 1990. During the same period, study participants predict the total percentage of bank deposits will decline only slightly, from 60 percent to 57 percent, as the market opens to thrifts, money funds and securities firms.

Tax Freedom Day

Tax Freedom Day fell on May 2 this year, according to the Tax Foundation, marking the second consecutive year of reversal of the overall trend for the date to fall later in the calendar. This means that the average worker by that day would have finished paying federal, state, and local taxes if every dollar earned since the beginning of the year went to satisfy some level of tax obligation. The Tax Foundation estimates that the average U.S. worker spends two hours and forty minutes of each workday earning money for taxes, with Federal taxes taking the greatest share— one hour and forty-four minutes. The federal tax bite is actually three minutes less in an eight-hour day than it was in 1982, due largely to the impact of the Economic Recovery Act of 1981. The decrease in federal taxation is offset largely by state and local taxes, whose inroads into a worker's day increased by two minutes.

Labor Market Changes

Employment in the consumer, financial, and service industries has topped total employment in the production industry, according to *Pathfinder*, a publication of Texas A M. This shift in the demographics of labor marks a first in the history of the American economy. In a related statistic, the National Opinion Research Center reports that the most satisfied workers, male and female, are those 60 years of age and older and those who had attended graduate school. Both groups responded 90 percent satisfied. The least satisfied, at 76 percent satisfaction, were those of both sexes between the ages of 18 and 29.

Penny Shortage Is Over

Increasingly heavy shipments of the new copper-clad zinc cent apparently have ended the penny shortage that plagued merchants during 1981-82, according to the Federal Reserve Bank of Atlanta's *Southeastern Economic Insight*. The dearth of pennies was due largely to hoarding by citizens hoping to reap windfall profits should the price of copper skyrocket. Although copper costs actually declined, demand forced the U.S. Mint in 1982 to increase production to a record average volume of nearly 70 million cents a day. Totaling some 16.5 billion annually, this represented seventy pennies for each person in the United States, more than double the number previously in circulation. Continued accelerated production in 1983 has satisfied the demand for pennies, as banks find themselves unable to unload supplies on hand.

Tax Audit Insurance

Tax audit insurance, an innovative insurance concept designed to protect qualified taxpayers from the adverse effects of IRS audits, was presented to a recent conference of the Tax Division of the American Institute of CPAs by Walter T. Coppinger, CPA and Senior Tax Consultant with Arthur Young and Co. The policy would reimburse specified additional tax assessments and pay the taxpayer's accountant or lawyer for specified professional fees incurred as a result of IRS examination. Exclusions, such as non-payment of penalties and omission of coverage for errors, are included to check potential abuse.

Conservation Goal Is Met

Jack A. Speer, chairman of the Aluminum Association's Energy Committee, announced to the Seventh Aluminum Industry Energy Conservation Workshop in June that the aluminum industry had surpassed its national energy conservation goal two years early. More than 90 trillion BTUs were saved through a 21.9 percent reduction in the amount of energy needed to make a pound of aluminum in 1982 as compared with the base year of 1972, equivalent to more than 700 million gallons of gasoline. More than 35 percent of the savings resulted from consumer recycling programs, as recycling saves 95 percent of the energy needed to produce aluminum from ore.

Competition for U.S. Toolmakers

Just as foreign car manufacturers provide stiff competition for their American counterparts, Asian and European firms bring similar problems for U.S. hand and power tool producers. Sales of tools in the United States in 1982 grossed $33 billion, but at least 15 percent of the market was captured by imports. U.S. power tool firms are facing their greatest competition in the higher-quality segment of the market, while continuing to sell more lower- and middle-priced power tools. Conversely, American hand tool manufacturers are discovering that consumers will

(continued from page 25)

COLLEGE HIGHLIGHTS

Richardson Named Acting Dean

Dr. James A. Richardson, chairman of the Department of Economics, assumed the duties of acting dean of the College of Business Administration Aug. 17, following the return of former Dean **Donald L.Woodland** to full-time teaching in the Department of Finance. Richardson will continue to act as dean during the coming year, while a selection committee seeks an outstanding candidate for the permanent position.

Professor **Loren C. Scott** is serving as acting chairman of the Department of Economics in Dean Richardson's absence. Professor **Lamar B. Jones** also has elected to return to full-time teaching in the Economics Department, relinquishing his position as associate dean of the College. Jones specializes in economic history and labor economics.

Dean Richardson said he will be examining the College's graduate programs, particularly the M.B.A., in terms of curriculum, promotion, and placement. He not only will seek ways to improve the quality of the programs, but will "study them in terms of their value to the local community." The Dean said he is especially interested in developing an accelerated graduate degree program, with weekend classes for working people. His first priority, he said, is to make a careful study of the College to get an estimate of its existing instructional, research, and public service capabilities. He will use this information to determine the personnel, equipment, supplies, and space needed to bring up the College's instructional and research capabilities to a desirable level.

A specialist in economic forecasting and macroeconomics, the Dean received his Ph.D. from the University of Michigan in 1971. He is a native of San Antonio, Texas, and is married to the former **Ellice Brown** of Shreveport (M.A. Finance, *LSU*, 1974). The Richardsons have two children: **Todd,** six years; and **Sally,** twenty months.

LSU Enrollment Continues Rise

Enrollment at *LSU* is increasing, paralleling the growth in the number of college students across the country, but unlike many other institutions, men outnumber women on the Baton Rouge campus. The number of students in the *College of Business Administration* continues to climb in both the undergraduate and graduate programs. Registration is up for the MBA program, where men outnumber women more than two to one, but nearly 43 percent are part-time. The number of Ph.D. candidates in business at *LSU* this summer is down almost a third from last year. National demand for new graduates has grown, however, with 16 percent of the doctorally-qualified, tenure-track positions in business schools across the country remaining vacant during the 1982-83 academic year.

Central American Banking School

Some thirty-five Latin American bankers completed the three-year program of the *LSU Central American Graduate School of Banking* in July, according to school director Professor **Donald L. Woodland.** Patterned after the *School of Banking of the South* at the University, the Latin American school is geared to the needs of Central American banking, and is carried on in the Spanish language. Classes are conducted for two weeks each summer at Tegucigalpa, Honduras, and at the Baton Rouge campus. Participants then undergo a third year of instruction at LSU prior to graduation.

Faculty Highlights

Professor **C. F. Sirmans,** formerly of the University of Georgia, has accepted appointment to the Louisiana Real Estate Commission Chair of Real Estate in the Department of Finance. Dr. Sirmans has written several textbooks in his field and has published widely in various professional journals. Recent publications include articles for the *Journal of Financial and Qualitative Analysis*, June 1983, *The Appraisal Journal*, April 1983. He is editor of the *American Real Estate and Urban Economics Association Journal* and is a consultant for the American Institute of Real Estate Appraisers.

Professor **Stephen Looney** of the Department of Quantitative Business Analysis was an invited participant in the National Science Foundation Conference on Sequential Nonparametrics, held in July at the University of Iowa.

"The Remedial State of Institutional Reform Litigation," an article written by **Debra Dobray,** assistant professor in the Department of Finance, was accepted for publication in the Spring 1983 edition of the *Baylor Law Review*. Professor Dobray also presented a paper on *"Public Receiverships"* at the Southern Regional Business Law Conference.

Group Insurance Reps Named

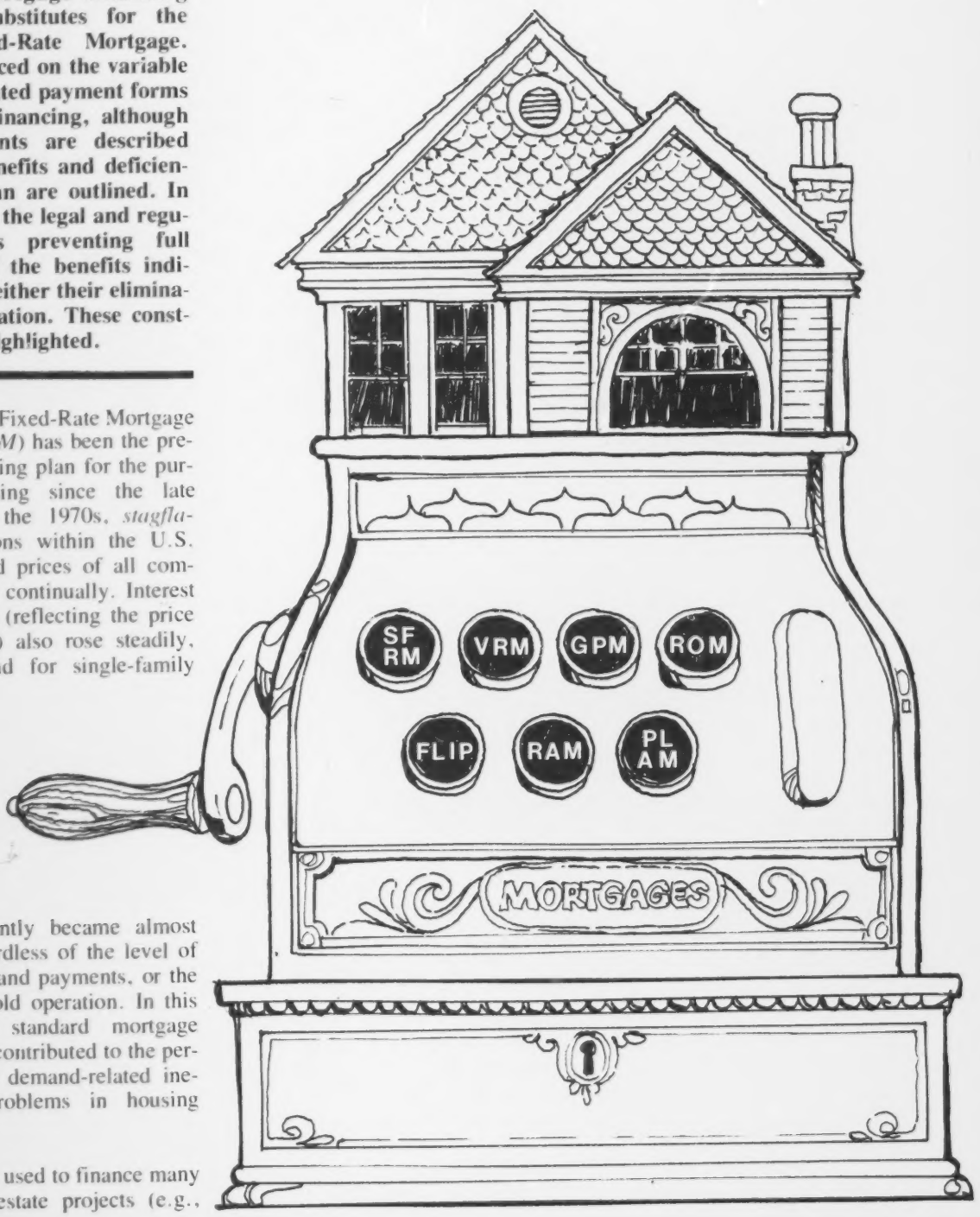
Dr. Donald G. Tarver, associate director of Instructional Support and Development, and **W. W. McDougall,** vice-president of Systems Administration, have been named to the Board of Trustees of the State Employee Group Benefits Program. Dr. Tarver, representing

(continued on page 25)

Charles L. Holley

Alternative Mortgage Instruments

This paper examines selected alternative mortgage financing methods as substitutes for the Standard Fixed-Rate Mortgage. Emphasis is placed on the variable rate and graduated payment forms of alternative financing, although other instruments are described briefly. The benefits and deficiencies of each plan are outlined. In some instances, the legal and regulatory barriers preventing full achievement of the benefits indicate a need for either their elimination or modification. These constraints will be highlighted.



The Standard Fixed-Rate Mortgage instrument (*SFRM*) has been the predominant financing plan for the purchase of housing since the late 1940s. During the 1970s, *stagflationary* conditions within the U.S. economy caused prices of all commodities to rise continually. Interest rates in general (reflecting the price of their money) also rose steadily, and the demand for single-family housing apparently became almost insatiable, regardless of the level of mortgage rates and payments, or the cost of household operation. In this situation, the standard mortgage instrument has contributed to the persistence of the demand-related inequities and problems in housing finance.

The *SFRM* is used to finance many types of real estate projects (e.g.,

multi-family shelters, shopping centers and commercial complexes); however, this paper concentrates on single-family residential financing. It is this sector of the housing market for which alternative mortgage instruments are expected to provide the greatest benefits to both lender and borrower.

Alternative Mortgage Types

There are at least a dozen or more alternative mortgage financing plans, including combinations and variations of each major instrument type, although this examination will be limited to the major alternative instruments.[1] These are the Variable Rate Mortgage, Graduate Payment Mortgage, Rollover Mortgage and Flexible Loan Insurance Program Mortgage. Each of these mortgage instruments has unique risk characteristics for both lenders and borrowers. Amortization schedules under various interest rate scenarios with comparisons to the *SFRM* are provided in *Exhibits 1-3*, to facilitate the analysis of these risks within an overall evaluation.

Variable Rate Mortgages

The most commonly used definition of a Variable Rate Mortgage (*VRM*) is that the interest rate on the loan reflects changes in market rates of interest. Thus, future monthly payments are not known at the time the loan is originated. The interest rate is usually tied to some reference index.[2] Frequency and magnitude of rate adjustment vary by state or origin of lending institution charter; however, there are some general constraints on the maximum adjustments allowable, such as the following:

1. A maximum annual change of 1 percent,
2. A 2.5-percent maximum overall change during the loan maturity period,
3. The reference index must have proven reliablity in moving with market interest rates and be independent of manipulation by the lending institution using the index, and
4. The maximum term is no greater than thirty years.[3]

The principal objective of the *VRM*, from the lenders' point of view, is to create a greater degree of interest sensitivity in mortgage loan assets relative to the interest-sensitive deposits needed to fund new additions to the mortgage loan portfolio. Portfolio profitability is protected in the short run because there is a better matching of interest paid on deposits and interest earnings on the loan. Long-term portfolio profitability should also be insured; however, the following three conditions must first exist:

a. *VRM*-type loans represent the largest portion of the total portfolio,

b. Rate adjustment constraints do not exist or limit the maximum adjustment over the loan maturity, and

c. Usury laws do not impose a ceiling on mortgage loan rates.

In summary, the main feature of a *VRM* is a shifting portion of the interest rate risk to the borrower throughout the life of the loan.

The major advantage of the *VRM* loan is implicit from the borrower's position. Interest rates on "SFRMs" are believed to contain a premium in addition to an increment over the cost of funds. This premium attempts to compensate the lender for older low-yielding loans and the lender's assessment of the future cost of funds.[4] Therefore, current mortgage borrowers absorb the full burden of rate premiums.

Interest rate adjustments (which are reflective of current period money market conditions) affect all *VRMs* in the portfolio, under the variable rate plans. Thus, premium points which subsidize the older low-yielding loans are not appropriate, and rates offered on new loans eventually should be lower than an equal fixed-rate mortgage.[5]

An example of a standard *VRM* (under a worst-case scenario) is provided in *Exhibit 1* showing the total annual payments and yearly outstanding balances.[6] The same amounts are shown for the Standard Fixed Payment Mortgage (*SFPM*), for purposes of comparison.

A significant problem evolves under a worst-case scenario. The total annual payment is equal under both plans, during the first year. However, in the subsequent four years, the difference in cumulative total annual payments is $1,281 ($15,764 minus $14,483) or 9 percent more than required by the *SFPM*. This difference increases to 15.4 percent over the amount paid on the *SFRM* by the end of the tenth year. The borrower is faced with a significant degree of uncertainty in monthly payments from year to year, despite rate-increase constraints.

There are several modifications to the standard *VRM* which achieve a more equitable balance of interest rate and payment burden for the borrower. For example, the *Dual-Rate Variable Mortgage* computes interest to be paid at one rate (which changes with a short-term reference index), while a long-term rate is used to compute the monthly payment. Another variation is the *Constant VRM*, which allows the loan maturity to change so that the monthly payment is constant.

EXHIBIT 1
Total Payments Made and Outstanding Balances for a "Worse-Case" VRM and an SFPM ($30,000, 30-Year, 9 Percent Mortgage)

End of Year	Worse-Case VRM	SFPM
	TOTAL PRINCIPAL AND INTEREST PAID	
1	2,896	2,896
2	5,982	5,793
3	9,135	8,690
4	12,416	11,586
5	15,824	14,483
10	33,498	28,969
30	104,197	86,900
	OUTSTANDING BALANCE	
1	29,795	29,795
2	29,592	29,570
3	29,389	29,326
4	29,184	29,057
5	28,976	28,764
10	27,618	26,828

Note: The VRM rate is allowed to increase by ½ percent per year and by 2½ percent overall.

EXHIBIT 2
Total Payments Made and Outstanding Balances for Two GPMs and an SFPM ($30,000, 30-Year, 9 Percent Mortgage)

End of Year	5-Year, 7½% GPM	10-year, 3% GPM	SFPM
1	2,188	2,408	2,896
2	4,540	4,888	5,793
3	7,070	7,443	8,690
4	9,788	10,075	11,586
5	12,710	12,785	14,483
10	28,419	27,607	28,969
30	91,254	92,335	86,900
	OUTSTANDING BALANCE		
1	30,533	30,304	29,795
2	30,945	30,562	29,570
3	31,212	30,765	29,326
4	31,306	30,908	29,057
5	31,197	30,983	28,764
10	29,098	29,975	26,828

Note: The 5-year GPM has payments graduating at 7½ percent per year and 10-year GPM has payments increasing at 3 percent per year.

Neither of these variable rate plans have been adopted by Congress nor sanctioned for experimentation by federal regulatory institutions. Both are very complex instruments, and pose potential problems for lenders in that negative amortization can occur. Therefore, cash inflows to the institution may not be balanced with outflows.[7]

The standard or modified *VRM* can generate benefits for borrowers, lenders, the mortgage market and the housing industry, despite these problems. Borrowers may find *VRMs* priced below the comparable *SFRM*. Contract provisions such as prepayment fees and assumption clauses could be liberalized. Lenders, under the various *VRM* plans, would not solely absorb the burden of upward interest rate changes, nor face liquidity problems caused by temporary deposit disintermediation.

The supply of funds to the mortgage market in turn would increase because of a smaller gap between comparable money market yields. Moreover, the magnitude of cyclical changes in the supply of funds should decrease. The housing industry in total should experience an upward shift in demand because of these benefits cited for borrowers, lenders and the mortgage market.

The *VRM* presents some equally significant deficiencies. Lenders, for instance, could have problems in pricing and repricing *VRMs* in periods of rapidly-rising rates. Moreover, the *SFRM* is competitively superior, under declining mortgage rates, and *VRM* contract provisions (without prepayment penalties) could cause temporary massive changeover to the standard mortgage vehicle.

Borrowers under variable rate plans assume more of the burden of interest rate increases and face greater uncertainty about future payment amounts and financial strain. The private sector segment of the secondary market may withdraw because *VRMs* may have greater default experienced and less predictable cashflows.

Graduated Payment Mortgages

This alternative mortgage instrument focuses on adjusting the monthly payment as opposed to the adjustment of interest rates in the variable rate plan discussed previously. By definition, a Graduated Payment Mortgage (*GPM*) has scheduled monthly payments that are initially lower than a comparable *SFRM*, but increases to a higher level later in the mortgage term. The graduation rate, the term over which

payments can increase, and interest rates are fixed throughout the life of the loan.[8]

A unique feature in the *GPM* instrument is the elimination of the heavy burden of initial monthly payments relative to income. This burden is commonly described in most comparative examinations of adjustable versus non-adjustable mortgages as the tilt effect.

Exhibit 2 illustrates an annual loan amortization schedule under two *GPM* plans. A standard rate loan amortization is provided for comparative purposes.[9] Under both *GPM* plans, negative amortization occurs immediately and continues into the fifth and seventh years of payments for the five-year and ten-year *GPMs*, respectively. The outstanding balance on each loan does not fall below the original principal until after the tenth year of maturity.

On the other hand, the first year total annual payments of the five-year *GPM* are 24 percent less than the first-year payments under the standard mortgage instrument. This ratio equals 17 percent for the ten-year *GPM*. After the first year, these comparative ratios between payment amounts of the two *GPM* plans and the standard rate mortgage decline about two percentage points per year through the fifth or sixth year of amortization. In summary, the typical *GPM* plan favors the borrower almost as greatly as the *VRM* favors the lender.

The major benefits to the borrower are that the graduated payment plan overcomes the tilt effect; permits the purchase of a higher priced and presumably larger home, given the same downpayment; and provides certainty of future monthly increases. An Alternative Mortgage Instruments Research Study project researcher predicted the five-year *GPM* plan could permit an increase of 35 percent in home acquisition prices using conventional underwriting criteria.[10] This study also estimated the number of households with minimum income requirements for purchasing a home would increase by 1.5-5.0 percent with universal use of the various *GPM* plans.[11]

GPM benefits are more indirect to the lender than to the borrower. The number of mortgage loans can be increased through financing plans, providing an opportunity to expand other services to a larger market. Secondary markets for insured *GPM* loans can provide an additional source for liquidity. Essentially, the focus of these benefits is an enhancement of long-term profit potential.

The *GPM* may have some deficiencies for both the customer and lending institution. The plan's major drawback for the borrower is its committal of a portion of future income increases to mortgage debt repayment. Furthermore, negative amortization causes the homeowners' equity to be diminished for the first four to seven years of payment, assuming low inflation.

Major deficiencies for lenders include an inability to change the interest rate as mortgage and money markets change. The negative amortization also has implications for the lenders' cash flow. As the balance-owing increases, the cost of funding these increases is likely to become greater than the original cost of funding the initial loan proceeds. Finally, delinquencies and defaults might increase if the borrowers' income or equity does not increase equal to the scheduled increase in payment or anticipated rising property values.

Graduated payment plans have been the most popular choice to date among the two alternative mortgage instruments presently authorized by Congress and other regulatory bodies. The features of lower initial payments relative to the standard fixed-payment instrument and certainty of future payment increases relative to the *VRM* are perceived as superior benefits to the homebuyer. The graduated payment mortgage plans have not been subjected to the test of protracted tight money conditions. Therefore, it cannot be concluded that the *GPM* should replace the *SFRM* without further trial.

Rollover Mortgage

The Rollover Mortgage (*ROM*) is similar to the Variable Rate Mortgage. The major differences relate to the frequency of interest rate adjustment and the rate index. *ROM* rates are fixed for a specified period (usually five years), but payments are based on the usual thirty-year maturity. The loan is renegotiated at the end of a specified period. The rate index, unlike the *VRM*, is the current mortgage loan rate at the time of loan renewal, i.e. each five-year interval after the loan origination date.

The Federal Home Loan Bank Board granted approval for all federally-chartered savings and loans to offer a renegotiated rate mortgage, which was conceptually equivalent to the *ROM*, on April 3, 1980. The following modifications in loan terms were imposed, however, in response to consumer-protection considerations:

1. The maximum allowable interest rate adjustment (up or down) is .5 percent per year, or 2.5 percent for a five-year renewal period;

2. Over the life of the loan, the total interest rate adjustment is limited to 5 percent above or below the initial rate;

3. The lender must renew the loan, even if payments are delinquent;

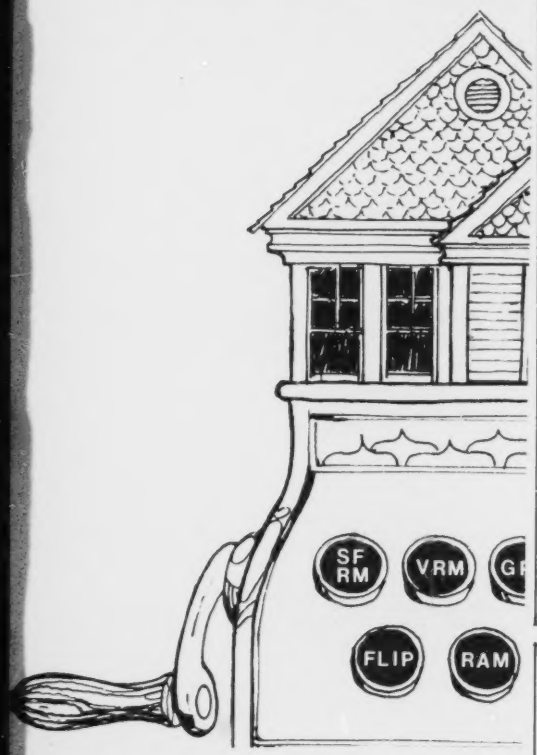


EXHIBIT 3
Total Payments Made and Outstanding Balances for a Five-Year Rollover, and an SFPM ($30,000, 30-Year, 9 Percent Mortgage)

End of Year	5-Year Rollover	SFPM
	TOTAL PRINCIPAL AND INTEREST PAID	
1	2,896	2,896
2	5,793	5,793
3	8,690	8,690
4	11,586	11,586
5	14,483	14,483
10	32,026	28,969
30	102,197	86,900
	OUTSTANDING BALANCE	
1	29,795	29,795
2	29,570	29,570
3	29,326	29,326
4	29,057	29,057
5	28,764	28,764
10	27,416	26,828

Note: The overall 2½ percent also applies to the rollover.

TABLE 1
Cumulative Monthly Increases Over Initial Payment[14] (Percent)

	YEAR 2	YEAR 4	YEAR 6	YEAR 11
VRM	4.43	13.26	22.00	22.00
ROM (5 years)	0	0	21.10	21.10
GPM (7½%, 5 years)	7.50	24.23	43.56	53.56
GPM (3%, 10 years)	3.00	9.27	15.93	34.39

4. Costs associated with a loan renewal are absorbed by the lender;

5. The lender must provide notice of pending renewal ninety days prior to the renewal date;

6. Prepayment (without penalty) is permitted within the first ninety days of the original loan date; and

7. The renegotiating period is flexible.[4]

The *ROM* is the universal Canadian instrument for financing residential property (excluding multi-family rental projects). Since the early 1970s, the permissible rollover term for lending institutions there has been five years or less, and the total amortization period has been twenty to thirty years.[13] The interest rate on conventional mortgages, at origination and renewal, is not indexed to any external interest rate, and usury law does not apply to residential mortgage loans. Therefore, the Canadian mortgage finance money market has less governmental intervention than does U.S. markets.

A form of the current *ROM* was prevalent in the United States prior to the Great Depression and was commonly referred to as a Balloon Mortgage. The essential difference between this kind of mortgage and the *ROMs* of today are the lender's guarantee to refinance the outstanding balance at renewal time and the maximum interest rate adjustment of current mortgages. Balloon Mortgages required interest payment only during the mortgage term. Widespread use of this method may have aggravated the collapse of the general housing market and its supporting credit markets during the Depression.

The *ROM* (like the *VRM*) creates a greater degree of interest sensitivity in the mortgage loan portfolio than does the *SFRM*, from the lender's point of view. There is a major difference in rate adjustment timing between the *VRM* and *ROM* instruments. Loans originated under the *VRM* plan contain a provision for a rate adjustment of .5 percent per year, with the first interest rate adjustment permitted within six months of origination. Rate adjustments on a *ROM* can occur only when the loan reaches the renegotiation date. *ROMs* also provide the lender with a capability for better matching the maturities of his loan assets with interest-bearing deposit accounts. The potential for sustained long-run profitability of the loan portfolio is increased, when these characteristics are combined.

From the borrower's viewpoint, the *ROM* overcomes several problems associated with the previously described instruments. The variable rate plans foster a high degree of uncertainty about future payments and the timing of interest rate

adjustments. Furthermore, modified *VRMs* are very complex and require certain optional contract terms (i.e.,the right to convert to *SFRM* plans and maturity extensions in lieu of monthly payment adjustments), which also complicate the contract. The *ROM*, by comparison, is simple to implement and easily understood by the borrower.

The borrower also enjoys other benefits. He bears the full burden of interest rate risk under most other *VRMs*, since changes in the cost of funds are passed to him. The *ROM* plan returns this risk element to the lender, but allows him to shift the burden to the borrower at a contracted interval (usually one to five years). Therefore, the interest risk is shared to a degree between the borrower and lending institution. Current *ROM* plans require the lender either to refinance or renegotiate a loan on a specified renewal date. This guarantee cannot be invalidated by current or past delinquency in payment.

Exhibit 3 compares a *ROM* to a *SFRM*. As indicated, the *ROM* (five-year plan) amortization is equivalent in total principal and interest payments to the *SFRM* through the first five years. Total payments for the next five years exceed the *SFRM* payments by 10.6 percent, however, even though the interest rate adjustment equals 2.5 percent. On the other hand, the outstanding balance continues to decline between the fifth and tenth years of amortization, with the *SFRM* decline exceeding the *ROM* by an increment of only $588 during the five-year period. Therefore, some growth in owner's equity should occur under the *ROM* plan, assuming past trends in property values continue.

Several unique features are offered by the *ROM*; however, the most significant benefit becomes apparent when comparing the cumulative change in monthly payments. *Table I* is based on a *30,000, thirty-year, 9-percent mortgage* and assumes a worst-case basis for rate increases (i.e., a 2.5-percent maximum increase over the initial rate and a .5-percent increase per year on the *VRM*, with a 2.5-percent maximum increase above the initial rate on the *ROM*).

The table illustrates the *ROM* ranks second-lowest in cumulative percentage increase behind the ten-year *GPM*, after five years of amortization. The five-year *GPM* instrument is highest, with a cumulative percentage increase over the initial payment of more than 43 percent. The plan ranks lowest in terms of cumulative percent payment change, after ten years of amortization; although, without the interest rate limitations inspired by the notion of consumer protection, the *ROM* and *VRM* could have cumulative payment increase ratios much higher than those shown in the table. If the term-until-renegotiation is reduced to less than five years, then the *ROM* and *VRM* are equal in their cumulative payment ratios.

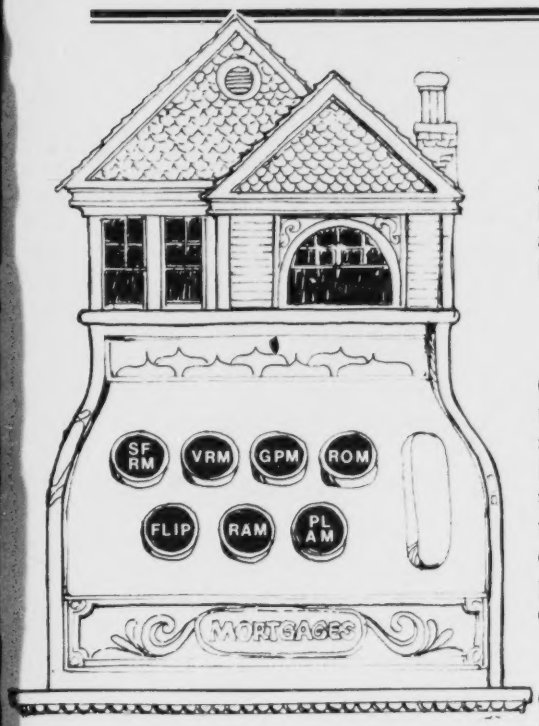
In summary, the *ROM* offers major advantages. Certainty of future payment for the borrower and cashflows for the lender, together with a simplicity of design, enhances understanding of terms by the borrower. The lender should experience nominal incremental costs in origination, administration and employee training. the major benefit provided to lenders by the *ROM* is a capability of providing an acceptable degree of interest sensitivity for assets with extended maturities.

Other Instruments

Individual mortgage lending institutions have developed many alternative instruments to overcome the practical limitations of the *SFRM*. Most of these mortgage instruments are modifications of *VRMs* or *GPMs*, such as the constant-payment *VRM* and the modified-rate *GPM*, which are designed to penetrate or satisfy some local segment of the consumer market. Some other alternative mortgage instruments do have concepts substantially different from the *VRM* and *GPM* basic concepts. The Reverse Annuity Mortgage (*RAM*), the Price Level Adjusted Mortgage (*PLAM*) and the Flexible Loan Insurance Program (*FLIP*) are examples of these unique instruments. The following discussion focuses on the general design of these additional alternative financing methods and comment on their purposes.

The Reverse Annuity Mortgage (*RAM*) is a complicated form of mortgage that permits the borrower to convert real estate equity into a stream of monthly cash payments to the borrower. Methods used by lenders to generate these payments are numerous, but the most common device is called the Rising Debt *RAM*.[15] Under this structure, the lender increases the loan balance with each payment to the borrower. Payments continue for the life of the borrower or until the ratio of loan to value reaches a contracted percentage (usually 95 percent). The only payment required by the borrower is interest on the rising loan balance, which is deducted from each installment before final payment to homeowner.

There are many other variations of reverse annuity plans other than the Rising Debt loan structure. The major characteristics of these variations involve the annuity aspect which can be obtained through the lender, an insurance company or a combination of both. In addition, the annuity can be paid out in lump sum from loan proceeds or paid to the borrower in monthly portions for a certain number of years. This form is called the Rising Debt Deferral Contract.[16]



All of these forms of reverse mortgages are designed for the homeowner group whose income is essentially fixed in amount. The main benefit achieved is the conversion of home equity into current income which is normally sufficient to pay interest plus supplement income. Ownership for life tenancy is also retained. The lender's principal and interest risk is minimized so long as the loan to value ratio is prudent.

There are several disadvantages. For instance, the homeowner sacrifices financial flexibility and liquidates a sizable portion of his financial wealth. If the homeowner using a *RAM* were to encounter an extended illness, the ability or capacity to pay sizable medical expenses may be exhausted by the reverse annuity structure. From the lender's viewpoint, another disadvantage relates to interest sensitivity. Typically, the interest rate is fixed throughout the term. In addition, the absence of amortization or only partial amortization can adversely reduce the cash flow from the mortgage portfolio. While the *RAM* instrument's design provides real benefits to the older homeowner, this form of mortgage has not been widely accepted. The main reasons are some of the diadvantages outlined, and the conservative attitude among older homeowners toward increasing debt.

The Price Level Adjusted Mortgage (*PLAM*) is another mortgage instrument which has been widely used in some European countries, as well as in Brazil. This mortgage is similar to the graduated payment instrument in that the interest rate is fixed but the outstanding balance and the monthly payments change according to changes in some price index.[17]

The Consumer Price Index or the GNP price deflator could be used as an index of prices in the United States. For example, a $30,000, 9-percent, thirty-year mortgage would have monthly payments of $241.39, and after one year the principal balance would equal $29,795. If the inflation rate during that year were 13 percent the balance owed would increase $3,873 to $33,668. The monthly payment would increase to $284.84 ($241.39 x .13), which is the monthly payment required to fully amortize the loan over the remaining twenty-nine years.

The *PLAM* loan structure is very popular in Brazil where inflation rates are frequently equal to or greater than the rate used in the example. In Brazil, on the other hand, wages, prices and savings interest rates are also indexed in various ways to the actual and projected rates of inflation.[18] This condition leads to a situation wherein increases in the monthly payments are almost entirely absorbed by subsequent rises in borrower income.

This instrument has not been approved for lenders within the United States. The experience of countries like Brazil, Israel and Finland, indicate effective operation of the *PLAM* instrument requires indexing of wages and time deposits as well as the loan interest rates. Impartial indexing necessitates an active government role in managing money markets, such as providing subsidies or insurance to borrowers and lenders. Presumably, the notion of more active and direct government intervention in the mortgage financing market and lending institution policy is not a desirable concept in the U.S. except under extreme economic adversity.

Another instrument that has been accepted in the U.S. is the Flexible Insurance Program (*FLIP*). Basically, this program has a structure similar to the graduated payment loan in that the interest rate is fixed, the initial monthly payment is lower than an equivalent conventional mortgage, and the monthly payment increases a given percentage each year for at least five years.

The main distinctive feature of the *FLIP* loan is that all or a portion of the available down payment is deposited in an interest bearing account with the lender. This deposit provides additional collateral for the loan which is drawn from each month to supplement the mortgage payment. The savings account is depleted and the borrower begins making level payments that will liquidate the loan over the remaining term of the loan at the end of the fifth year.[19]

The main benefit for the borrower is that the lower monthly payments permit the purchase of a larger, more expensive home than could be purchased under the standard mortgage instrument. The lender, on the other hand benefits from an expanded loan market and a low cost, but diminishing deposit. This plan, however, will not cure the lender's dilemma caused by fixed-rate, long-term loan investments which are funded by interest sensitive, short-term deposits.

Summary

Inflationary trends have moved to new levels, increasing not only in magnitude but also in frequency of upward adjustment in the general price level. The standard fixed-rate, fully-amortized, long-term mortgage loan ceases, in this economic context, to function as originally intended. While this method of financing the purchase of housing is not solely responsible, it does tend to exacerbate the problems created by volatile movements in interest rates. This paper has described how alternative forms of mortgage financing may assist in overcoming the mortgage market imperfections prevalent today.

The description and examination of each non-standard mortgage contract has included those instruments which have been sanctioned for experimentation by regulatory agencies. These agencies limited certain contract provisions such as specifying maximum interest rate adjustments, as well as the frequency of adjusting and establishing index rate standards. In essence, regulatory and legislative institutions at all levels have accepted an active role in promoting change in relationships between the housing market and financial institutions.

The major conclusions derived from this examination are that interest-sensitive alternative mortgage instruments are appropriate for commercial banks. Market acceptance by consumers is a key factor, and their attitudes toward alternative mortgage instruments are unclear. On the other hand, legislative representatives and consumer protection organizations generally have not supported most of the alternatives to the *SFRM*. In conclusion, the outlook for most alternative mortgage instruments is less than optimistic with the exception of the *ROM*.

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■

ENDNOTES

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[2]David M. Kaplan, "*Alternative Mortgage Instruments Research Study*," **Federal Home Loan Bank Board Journal** (November 1977), p. I-1.

[3]Ibid., pp. I-7, I-8.

[4]Smith, "*Reforming the Mortgage Instrument*," p. 2.

[5]Ibid., p. 2.

[6]Kaplan, **AMIRS**, Table 4.

[7]Peat, Marwick, Mitchell and Co., **Accounting, Taxation, Origination and Servicing Implications of AMIRS**, (Washington, D.C.: Federal Home Loan Bank Board, August 1977), pp. 13-14.

[8]Kaplan, **AMIRS**, p. I-1.

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[10]James D. Smith and Phillip R. Weist, "*Demographic Study of Potential Demand of AMIRS*," **Alternative Mortgage Instruments Research Study**, (Washington, D.C.: Federal Home Loan Bank Board, November 1977), p. IV-3.

[11]Ibid., p. IV-33.

[12]"*Rollover Home Loans Seem Likely to Spread as the Bank Board Acts*," **The Wall Street Journal** (April 4, 1980), p. 18.

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[14]Kaplan, *AMIRS*, Table 3.

[15]Donald Edwards, "*Reverse Annuity Mortgages*," **Alternative Mortgage Instruments Research Study**, Vol. III, (Washington, D.C.: Federal Home Loan Bank Board, 1979), p. XIX-1.

[16]Jack Guttentag, "*Reverse Annuity Mortgages, How Can S'Ls Write Them*," **Alternative Mortgage Instruments Research Study**, Vol. III (Washington, D.C.: Federal Home Loan Bank Board, 1977), p. XVIII-4.

[17]Kaplan, *AMIRS*, Table 1.

[18]Richard Anderson and Donald R. Lessard, "$Price-Level-Adjusted *Mortgages in Brazil*," **New Mortgage Designs for Stable Housing in an Inflationary Environment**, ed. Franco Modigliani and Donald R. Lessard, (Boston: Federal Reserve Bank of Boston, January 1975), pp. 116-18.

[19] **Savings and Loan News** (August 1977), p. 51.

RESEARCH NOTES

State Home Appreciation Rates

by Ladd M. Kochman and Ross Daniel

One of the largest components of inflation is the increase in the cost of housing. Double-digit jumps in the annual appreciation rate for houses were commonplace from the early 1970s until 1982. It would be, however, unwise to generalize too broadly since, for a variety of reasons, the impact of soaring prices has been felt unevenly in different parts of the country.

To assess the involvement of Louisiana in this upward price spiral, annual percent changes in the cost of housing for the 1970-82 period were derived from price estimates contained in a recent CIT Financial Services study. The results show that Mandeville experienced the largest annual gain in housing prices (13.5 percent), with Lafayette and Breaux Bridge tied for a close second (13.0 percent).

Other double-digit increases were found at Slidell and Denham Springs, 10.9 percent; St. Martinville, 10.7 percent; Lecompte, 10.6 percent; Downsville, Boutte, La Place, Sulphur, and Sorrento, 10.5 percent; Raceland and Zachary, 10.3 percent; Gonzales, 10.2 percent; Kenner, 10.1 percent; and Plaquemine, 10.0 percent. The smallest increases occurred at Monroe, 3.8 percent; Gretna, 5.3 percent; Alexandria, 5.9 percent; Bastrop, 6.0 percent; Springhill, 6.5 percent; New Orleans and Rayville, 7.1 percent.

A regression study conducted by the authors revealed that the changes in the prices of Louisiana housing were an increasing function of the changes in the number of available homes for sale and the average income of the heads of households and a decreasing func-

(continued on page 25)

LOUISIANA BULLETIN

Taxpayers' Assistance Line Cut

The Louisiana Department of Revenue and Taxation disconnected its toll-free assistance line June 30 as part of the state's budget-cutting effort. The line was available to taxpayers within Louisiana to call the main office in Baton Rouge about tax matters. Citizens should now contact their nearest district office for assistance.

Halter Delivers Giant Tugboat

Halter Marine, Inc., of New Orleans delivered the first of two new Sea Titan class vessels to the Penrod Drilling Corporation of Dallas. The Kodiak I, at 225 feet in length and generating 12,280 horsepower, is the largest, most powerful, diesel-electric, tug/supply boat ever built in the United States. Although it weighs less than 500 gross tons, cargo capacity is estimated to be 2,200 long tons with additional capacity on deck for 900 long tons. The boat is capable of sixteen knots and is equipped for extended-range towing at full horsepower.

Baton Rouge Port Tonnage Up

Total tonnage at the Port of Baton Rouge for 1982 amounted to 5,339,809 tons, up from 3,772,345 tons in 1981. The greatest increase was at the new midstream anchor buoy facilities, where bulk commodity cargoes exceeded one million tons. While general cargo and barge terminal tonnages were down slightly, significant increases were noted in dry bulk commodities, petroleum and molasses.

N.O. Firm Gets Corps Contract

The Great Lakes Dredge and Dock Co. of New Orleans has been awarded a contract by the U.S. Army Corps of Engineers for maintenance dredging of the Houma Navigation Canal from the Louisiana shoreline 14.5 miles out into Terrebonne Bay and the Gulf of Mexico. The work is expected to take three months and will restore the channel to its Congressionally-authorized dimensions, completing the project begun last year with the dredging of the canal from mile 12.1 inshore to the city of Houma.

Canal St. Landmark to Reopen

The new ERTA corporate tax incentives allowed by the IRS for historical restoration apparently are having some immediate beneficial effects for Louisiana. Goudchaux of Baton Rouge is planning to reopen the famed Maison Blanche Building store in New Orleans and redesign the neighboring Kress Building into a combination of retail and office space, with a 384-space, eight-story parking garage. James F. Harner, vice president for corporate relations, says his company expects to have the facilities open for April 15, 1984, in time for the Louisiana World's Fair. Refurbishing of the two buildings will include restoration of their original classic facades.

Manufacturers Directory

A twenty-page supplement to the 1983-84 **Directory of Louisiana Manufacturers** is available, free of charge, through the State Department of Commerce. Data for the 1984-85 directory, scheduled for delivery at the end of this year, is available on mailing labels and computer printouts for a nominal charge.

Puerto Rican Gets Recognition

Roberto Lugo d'Acosta has been named the International Trade Mart's International Businessman of the Year for 1982. He is executive director of the Puerto Rico Maritime Shipping Authority which has greatly enhanced the international position of the port of New Orleans through expansion of its services and facilities. The company, also known as Navieras de Pureto Rico, is the largest carrier in the $11 billion U.S.-Puerto Rico trade, handling over 75 percent of the trade between San Juan and ports in the United States. Navieras participates in President Reagan's Caribbean Basin Initiative program, providing shipping services and technical aid to assist Caribbean countries in building trade.

Louisiana Independent Bank

Louisiana Independent Bank, the nation's first federally chartered *banker's bank*, has been accepted for filing by the Office of the Comptroller of the Currency at Washington, D.C. The application requests permission for a group of Louisiana banks to operate a jointly owned financial institution to offer state banks services typically provided by large correspondent banks. Some twenty-three state banks are committed to purchase $5 million in LIB stock. Organizers hope to have $15 million in stock sold and over fifty banks as shareholders when LIB opens in January, says L. J. Folse, chairman of LIB and president of Terrebonne Bank of Houma. The bank will do no business with the public, and profits earned from its operation will be returned to the investor banks. Bank officers are being recruited for the Baton Rouge-based institution. ■

NATIONAL NEWS

(continued from page 14)

buy the cheaper foreign products. Retailers of American tools have initiated aggressive promotional campaigns, emphasizing quality rather than price.

Automated Tellers

Banks will rely increasingly on computers in the next five years, according to a survey conducted by Response Analysis Corporation. The firm interviewed 202 bank executives and reported the results at the American Bankers Association's annual meeting in May. The study revealed 19 percent of manned branches will be closed over the next five years. One teller in six will be replaced by ATMs, cash dispensers and other customer-activated terminals in the next three years. Four out of five executives expected banks to restrict access to tellers, based on a minimum balance, and 10 percent said all customers would be required to use the machines. Most of the respondents believed that the manned branches would be replaced by minibranches in stores and shopping malls.

Supplemental Income for Elderly

A charitable remainder trust is an excellent way for the elderly to supplement their incomes and settle their estates. Property representing a large, unrealized capital-gains can be donated to a charity, which sets up an annuity for the owner based on the market value of the donation. Donors avoid the capital-gains tax and enjoy substantial deductions on their income taxes, while the charity may sell the property without tax penalties. Any large charitable organization has attorneys who can legally construct such a plan.

Houston Is Tops for DP Pay

Salaries in data processing increased by 5.1 percent from 1982 to 1983, according to *Infosystems Magazine's* 25th Annual DP Salary Survey appearing in its June issue. The study shows Houston to be the highest paying city reported for the position of data processing manager, with an average annual salary of $44,148. Jersey City-Newark and Dallas-Fort Worth were in second and third place, with salaries averaging $41,132 and $38,636 respectively. The survey reveals that, by industry, transportation is the leader in DP manager salaries with a yearly average of $40,404, followed by public utilities, $39,936, and advertising/printing/publishing, *37,960*. Infosystems' survey covered nearly 13,000 data processing workers in more than 1,200 organizations nationwide. ■

COLLEGE HIGHLIGHTS

(continued from page 15)

the Board of Regents, was elected to serve a four-year term to expire in September 1987. McDougall, representing state retirees, will fill an unexpired term to end in September 1986. Both will be sworn in at the September meeting of the Board.

Energy Group Holds Seminar

A seminar entitled *Energy and the Economy: Revisited* was held at *LSU* in June. The meeting was the latest in a continuing series on critical issues in energy sponsored by the Louisiana Department of Natural Resources and the Center for Energy Studies at *LSU*. Those presenting papers included **J. Trent Williams,** undersecretary, Louisiana Department of Commerce; **Dr. James A. Richardson,** acting dean of the College of Business Administration; **Dr. Loren C. Scott,** acting chairman of the Department of Economics; **Dr. Fred W. Wrighton** and **Roberta Scull,** Center for Energy Studies. Out-of-town speakers included **Dr. Jack N. Barkenbus,** Institute for Energy Analysis, Oak Ridge Associated Universities, and **Dr. Milton L. Holloway,** former executive director of the Texas Energy and Natural Resources Advisory Council.

Small Business Study Grant

The Economic Development Center (EDC) of the Division of Research and Development has received a $44,000 Board of Regents grant to study the international exporting potential for small companies, announced principal investigator **John P. Manson Jr.** The research will be designed to identify the most successful factors in marketing products to foreign countries by small firms, and methods for the EDC to use in helping state small businesses to overcoming barriers. A sample will be drawn from firms in two Louisiana industrial groups. ■

RESEARCH NOTES

(continued from page 23)

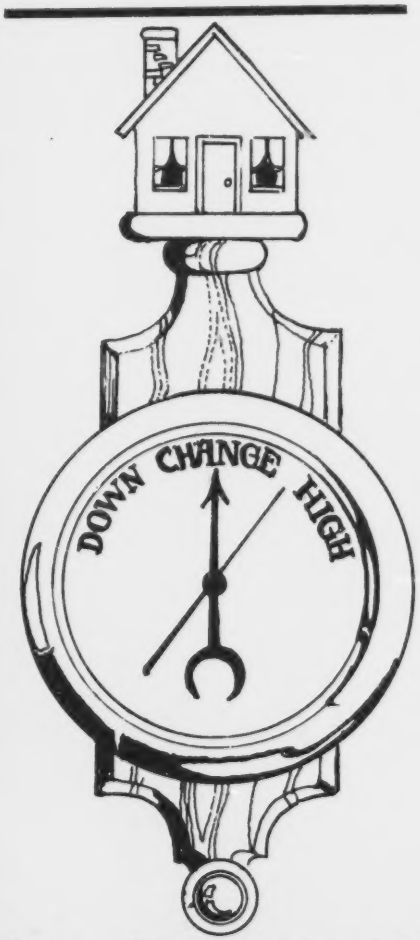
tion of the changes in the size of the population and the average age of the population.

This study included fifty-two Louisiana cities and towns. Interested readers are invited to write the authors at the Nicholls State University College of Business Adminstration in Thibodeaux for a complete set of appreciation rates. ■

James D. Shilling and D. Scott Laverty

Housing Forecasts for the 1980s

This paper attempts to examine some of the more important housing trends of recent years and to analyze their probable impacts on Louisiana's housing needs. Several major changes at the beginning of the 1980s caused housing to become more sensitive to interest rates and household incomes, as well as national monetary policy. These factors are crucial to an understanding of both the role of housing in the economy and of the returns householders can expect to earn from their investments.



Economists at the beginning of the decade predicted an enormous growth in the demand for housing services in the 1980s that has yet to be realized. The 1980s have been less than optimistic, with drastically declining national housing starts making 1981 the worst year for the industry since 1945.

A decline in mortgage rates that began in mid-1982, however, has caused housing demand to show some signs of recovery. These include such factors as a decrease in mortgage interest rates from approximately 17 percent to about 12 to 13 percent in 1983, a rise in sales of new single-family houses, and a decrease in unsold listing agreements. Improved economic and financial conditions have encouraged builders to increase their activities, while displacing concerns, at least temporarily, about the urgency of housing problems in the United States.

Housing-market trends, from an economic standpoint, depend upon many factors. The most important relate to homeownership affordability, mortgage market conditions, and sociological and demographic trends. Changes in any one of these factors will influence both housing starts and any return to housing for investment purposes. A unique feature of owner-occupied housing has been its attractiveness as an investment to millions of households.

The United States shifted from a pre-World War I position of being a predominately renter-ownership society, to its current stance as a owner-occupied society. The percentage of householders owning their homes has steadily increased to a level of more than 66 percent. This increase is remarkable, considering (1) the rise in the number of young, primarily individual households, which logically should have tended to decrease the percentage of households able to afford or to desire homeownership; and (2) the rapid increase in the price of single-family housing during the past decade.[1]

Analysis of Housing Markets

Homeownership's affordability depends on the interrelationship between the level of interest rates and changes in housing prices. Increasing prices for housing during inflationary periods generally lowers the *real* financing costs for households unconstrained by mortgage market conditions. Capital gains make homeownership investment attractive to buyers in periods of rising prices. Homeownership's optimistic investment aspect, when combined with our favorable tax treatment (zero taxation of implicit rents, deductibility of interest and property tax payments, and exemption of capital gains from taxation—assuming the gain is *rolled over* into another house), has encouraged many renters to buy.

Householders of the 1960s and '70s generally shifted their portfolios away from other real equity claims, such as stocks, and toward investments in owner-occupied housing. Money that could have been channelled into other investments was spent on meeting higher mortgage payments in anticipation of extraordinary sale returns.

This is not to say that all households found housing affordable. Owners had to face the basic problem of coping with cash flow problems created by the tradeoff between high nominal interest rates and the capital gains they could expect to accrue when their houses were sold. Furthermore, most first-time home buyers found meeting higher monthly mortgage payments to be an extremely difficult means of earning future capital gains.

Table 1 presents monthly mortgage payments on a 1974 constant-quality

house as a percentage of median family income for selected years. These figures demonstrate mortgage payment ratios have escalated in recent years, showing that the median-income household purchasing an average-priced house in the 1982-83 period, with a 12-percent, fixed-rate mortgage, experienced a ratio of mortgage-payment-to-income in excess of 44 percent. This constitutes a significant redistribution of income toward housing.

Yet, households able to afford housing in the past generally have experienced *extraordinary ex post rates* of return (annual rates of return calculated when the house is sold). Fixed-rate mortgages with a twenty-five-year term-to-maturity, have averaged about 12 percent in excess of required returns during the 1960 to 1980 period for housing financed with 25-percent downpayments. These returns result from the fact that house prices usually have increased much more rapidly than other costs, and mortgage lenders traditionally have borne all of the risks of unfavorable changes in interest rates in standard level-payment mortgage contracts.

This latter point means that as inflation increases, the burden imposed by high nominal house payments on a standard fixed-payment mortgage gradually declines over time in real terms (assuming household income keeps pace with the average rate of inflation). Thus, most households have found inflation lowers the real cost of ownership and provides *extraordinary ex post rates of return*. Whether or not current or future housing investments continue to earn returns in excess of those available on other investments depends heavily on the future of the mortgage market.

TABLE 1
Mortgate-Payment Constraints for Households, Selected Years

Period	Average Sales Price Constant Quality House	Average Monthly Mortgage Payment	Median Household Income	Mortgage Payment Ratio
1962-64	$22,557	$145.3	$ 7,133	25.5%
1967-69	26,467	188.4	9,384	24.1
1970-72	30,850	239.4	11,144	25.8
1975-77	47,225	402.3	15,997	30.2
1979-81	75,883	927.6	21,896	50.8
1982-83	83,900	891.4	24,085*	44.4

Source: Mortgage rate is from the Department of Housing and Urban Development prior to 1964, and the *Federal Home Loan Bank Board Journal* afterwards; the average sale of a constant quality (1974) house is from the U.S. Bureau of the Census, *Construction Reports*, series C27, *Price Index of New One-Family Houses Sold*; disposable median income per household is from the U.S. Bureau of the Census, *Current Population Survey*.

*Conservatively estimated at 10 percent more than in 1979-1981.

TABLE 2
Extraordinary Returns Earned on Investments in Owner-Occupied Housing, Selected Years

Period	Required Returns	ExPost Returns	Excess Nominal Returns
1962-64	.0411	.1102	.0691
1967-69	.0487	.1596	.1109
1970-72	.0555	.2245	.1690
1975-77	.0634	.2093	.1459
1979-81	.0989	—	—
1982-83	.0840	—	—

Source: Required returns on housing equity for households in low to medium marginal tax brackets are taken to be the after-tax mortgage rate because taxable bonds and mortgages are reasonable investment alternatives; marginal tax rate is assumed to equal 0.30; ex post returns are computed based on the actual value of houses sold assuming a five year holding period.

Mortgage Market Trends

Mortgage market conditions have changed significantly since the 1960s and early 1970s primarly because of

1. The phasing-out of federal programs designed to subsidize mortgage rates at the expense of depositors at financial institutions;
2. Improvement in the ability of financial institutions to cope with interest rate cycles; and,
3. Increased activity in the secondary mortgage market, where financial institutions can sell loans to raise capital for a more elastic supply of funds.

While these changes have improved the financial strength of the mortgage market and have made it more competitive, they also have eliminated the implicit subsidies that have kept mortgage rates relatively low in the past.[2]

Mortgage rates have more fully reflected the total costs of lending since 1980. The phasing out of Regulation Q, which placed ceilings on interest rates financial institutions could pay to depositors, and the elimination of usury laws, which restricted the amount lenders could charge mortgage borrowers, has virtually removed all artificial barriers to the determination of home mortgage rates.

The results have been that mortgage rates have risen sharply, *vis-a-vis* other market rates since 1979. The yield spread between conventional mortgage loans and United States Treasury bonds has increased from 1.2 percent in 1979, to 1.81 percent

in 1981, and to 1.77 percent in 1982 (see *Table 3*). This suggests it has become somewhat more expensive to finance housing than other types of investments.

The main point is that mortgage interest rates are no longer susceptible to artificial controls or market imperfections. For better or worse, the mortgage market has become more competitive with, and more sensitive to, certain economic variables, especially to the monetary policies of the Federal Reserve. The Federal Reserve has a significant impact on both interest and mortgage rates. Its actions in 1979 and 1980 played a major role in escalating mortgage rates in 1980 and 1981.

This unprecedented increase in mortgage rates caused the first significant rise in the real cost of homeownership in decades.[3] It marked a definite change from previous periods, when rates could be characterized as being *sluggish* in adjusting to changes in inflation and uncertainty. The increase also marked a definite change in the likelihood housing would continue to earn extraordinary gains similar to those of the past. Doubt surrounding long-term mortgage lending and investment returns on housing has led many builders to forecast a decreased demand for owner-occupied housing units, despite strong sociological and demographic trends established during the 1970s.

Sociological and Demographic Factors

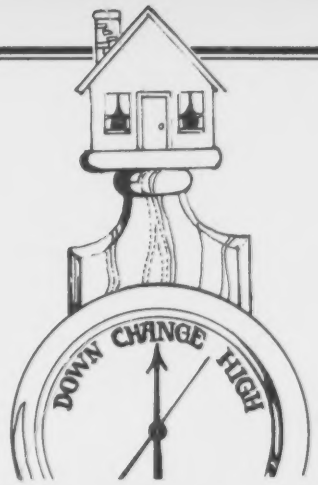
Sociological and demographic trends at the start of the 1980s were expected to keep net household formations rapidly increasing for the next two decades. Attitudes toward privacy and the demand for homeownership, which began to strengthen in the previous decade, were important reasons for a projected large growth in homeownership. Rapid increases in the nation's divorce rate and the establishment of separate households also contributed to this predicted massive increase in homeownership. Inflation pushed Americans into higher marginal tax brackets, making the mortgage interest write-off even more desirable.

The demographic demand for housing units is derived from the age distribution of the population, and the way in which the population groups itself into household units. Startling, but highly predictable, changes in these 1970s demographic factors caused a significant increase in the demand for housing. Specifically, the impact of the World War II *baby boom* on the housing market led to a dramatic increase in the age group of first-time homebuyers.

Changes in homeownership, however, depend upon economic and financial conditions, as well. Pronounced slowing of household formation, and the decreasing percentage of households deciding to own have occurred in each post-war housing crunch to date. In these periods, marriages may be postponed, children may decide to delay leaving home, and households may double up to share dwelling units. Housing-demand forecasting involves incorporating general economic variables, as well as household changes in the attractiveness of owning versus renting. The affordability of housing and mortgage market conditons dynamically interact with sociological and demographic factors to determine housing demand.

Housing Needs in Louisiana

Figure 1 plots actual residential construction for the major Louisiana metropolitan areas from 1977 to 1982, plus our forecasts of starts for the period 1983 to 1992.[4] The graph points out state construction has been affected severely by national business fluctuations and high interest rates. Starts, which were high in 1977 and 1978, declined drastically in 1979 and 1980, and showed some signs of recovery in 1981, as construction increased by 4 percent. Actual 1982 construction, however, displayed less buoyancy, as construction fell 1.5 percent from the preceding year.



The forecast of starts given in *Figure 1* is based on two alternative assumptions regarding changes in homeownership. The high estimate supposes homeownership growth will experience a pattern similar to that of the previous decade. That is, the aggregate rate of homeowners-to-total-households is assumed to remain constant at the 1980 level. Housing needs, then, are determined by the change in population times the projected homeownership rate. This implies almost 22.4 thousand annual units will be needed during the next decade.

The low estimate is based on a modeled response of homeownership to economic conditions. This response assumes the number of homeowners decreases by 0.5 percent for every percent increase in the real cost of owner-occupied housing.[5] Based on this information, and the assumption that the real costs of owning will continue to remain high, as few as 18,000 units of new housing construction per year could be needed during the next decade.

Housing activity in Louisiana may only return to 75 percent of the enormous growth rate it experienced

during the 1970s, if current economic conditions and less-favorable affordability and mortgage market terms prevail. The difference between the two estimates represents a potential *pent-up* demand for housing that may never materialize unless economic conditions return to more advantageous terms.

We can see that either earlier estimates of housing demand are in need of revision, or a significant housing crisis may be forming. Inflation-adjusted interest rates should continue to wreak havoc with the demand for housing, unless new housing policies are formed to make it easier for low-to-moderate-income households to have access to housing. In light of high real interest rates and mortgage terms that more fully reflect the *true* cost of debt, households should be skeptical about earning extraordinary returns from housing in the future.

Summary

The housing market appears to be in transition from a period when housing was considered a socially meritorious good and policies were designed to subsidize housing investments, to a era in which financial reforms and major tax changes are neither pro- nor anti-housing Passage of the Economic Recovery Tax Act of 1981, with its increased tax depreciation for nonresidential and rental housing; the expansion of Individual Retirement Accounts; and the reduction in the maximum rate on unearned income; have served to decrease the preference toward housing as an investment, in view of the favorable tax treatment offered alternative investments.

Housing used for purposes other than shelter, therefore, has lost some of investor attractiveness it experienced in the 1960s and 1970s. Although housing starts improved recently, the long-run prospects are that they will not exhibit the spectacular growth of the 1970s until real interest rates come down further or investment expectations for housing improve.

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TABLE 3
Interest Rates and Yields on Conventional Mortgages versus Treasury Securities

Year	Conventional Mortgage*	10 year Gov't Securities	Spread
1979	10.57%	9.38%	1.19%
1980	13.15	11.50	1.65
1981	15.77	13.96	1.81
1982	15.71	13.94	1.77

*Secondary market gross yields on conventional mortgages with 80 percent loan-to-value ratios or private mortgage insurance (PMI) on the amount of the loan exceeding 80 percent of the value of the house. The low loan-to-value ratio combined with the use of private mortgage insurance makes these mortgage loans virtually riskless. Thus the spread between the interest rate on conventional mortgages and 10 year U.S. Treasury securities reflects the increased cost of financing housing plus a "call" option mortgage borrowers have to refinance their loans if interest rates rise.

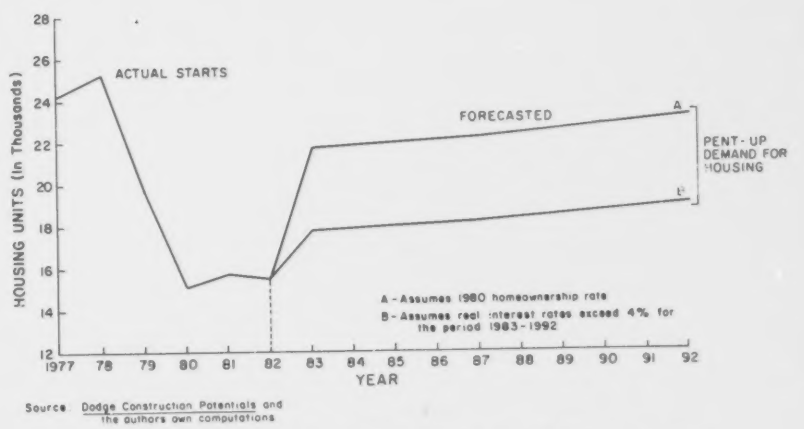

FIGURE 1. ACTUAL AND FORECASTED RESIDENTIAL CONSTRUCTION FOR LOUISIANA 1977-1992

Endnotes

[1]Dwight M. Jaffee and Kenneth T. Rosen, "*Mortgage Credit Availability and Residential Construction*," **Brookings Papers on Economic Activity**, 2, 1979.

[2]Robert M. Buckley and Robert A. Van Order, "*Housing and the Economy: Popular Myths*," **Journal of the American Real Estate and Urban Economics Association** (Winter 1983), pp. 421-41.

[3]Patric H. Hendershott, "*Real User Cost and the Demand for Single-Family Housing*," **Brookings Papers on Economic Activity**, 2, 1980.

[4]The housing start data are taken from the bd:Dodge Construction Potentials, McGraw-Hill Information Systems Company. The starts for Louisiana include the following SMSAs: Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans and Shreveport. Data found in the Dodge Construction Potentials refers to total residential housing starts. A forecasting error based on the difference between actual residential and predicted single-family starts was derived and added to the projections to make the single-family housing-starts predictions consistent.

[5]The details of the basic model are given in Patric H. Hendershott and James D. Shilling, "*Capital Allocation and the Economic Recovery Tax Act of* 1981$," **Public Finance Quarterly** (April 1982), pp.242-73. Interest rates are assumed to equal 12 percent during the forecast period, while inflation is assumed to equal 6 percent. Actual changes in population over the 1983-92 period are used to convert the change in the homeownership rate into the number of housing starts.

Stephen Farber

FORUM

Higher Education in Louisiana, A Ranking Among Southern States

The anticipated decline in the relative importance of oil- and gas-related activity in Louisiana has stimulated controversy over the state's future. The mention of one panacea, high technology industry, has fostered an examination of the status of higher education in this state. The purpose of this report is to address the higher educational standing of Louisiana *vis-a-vis* other Southern states. While no single number reflects the quality of an euducational system, ranking states according to various quality-related measures can provide an impression of relative merit. This report lists Southern states according to several measures that reflect the comparative status of their higher educational systems.

If the quality of an institution's graduate curriculum reflects the general worth of its higher educational policy, a ranking of a state's doctoral programs can indicate the condition of its higher education.

Surveys of the quality of various Ph.D. programs were made in both 1969 and 1981. These asked respondents to rate the quality of a graduate faculty by discipline on a scale from 0 to 5. A score of 2 reflected an adequate quality of faculty.

Twenty-seven diciplines were included in the study. Table 1, Column 3, shows the number of diciplines which were rated 2 or better at each state's major public university in 1981. *Louisiana State University-Baton Rouge (LSU-BR)*, with nine, ranked eighth among Southern states in 1981. *LSU-BR* ranked fifth in 1969, as Column 4 shows. In fact, the University was the only major state public university with fewer diciplines of note in 1981 than in 1969.

The criteria for inclusion in the 1969 survey was that the discipline at the university graduated at least one Ph.D. in the 1959-69 period. Inclusion for the 1981 survey varied by discipline. On the average, inclusion required that the discipline at the university graduated at least six Ph.Ds in the 1976-78 period. A discipline could be dropped from the ratings if its size was not sufficient.

Several states have more than one major public university. Adding the number of disciplines with a score of 2 or better for the top two universities in a state yields Columns 1 and 2 in Table 1. Louisiana's rank fell from sixth to eighth between 1969 and 1981. Texas, North Carolina, Virginia, and Florida had at least three times as many disciplines of note as Louisiana.

Table 2 lists doctorates awarded by public universities in four areas related to high-technology industry in 1979-1980. Texas graduated nearly seven times the number graduated by Louisiana, which ranked eighth. Although it is not shown in this table, the number of awarded biological science doctorates grew between 1970 and 1980 in the top four states while declining in Louisiana. In fact, Louisiana led in the percentage of decline in doctorates awarded in the fields included in Column 1. Table 2 also shows that Louisiana tied with Alabama in ninth place for federal dollars received by state public colleges and universities in 1979-1980.

Data on Current Funds Expenditures and Mandatory Transfers (CFE) are collected by the National Center for Educational Statistics (NCES) separately for each institutional unit having its own institutional code. The major difference between states is whether or not their medical schools are separate units. If the medical schools are not separate units, a state's reported CFE per full-time-equivalent (FTE) student will include the expenditures for those medical schools. Several states, including Louisiana, have separate medical schools; however, their medical school funding levels and enrollments are also collected by NCES.

Table 3, Column 1, lists total CFE per FTE, including medical schools. Louisiana's data reported to the NCES excludes its Law Center; figures including the Law Cen-

TABLE 1

Measure	Louisiana's Rank out of 11 Southern States
1. Quality of Doctorate Faculty	8
2. Doctorates Awarded	8
3. NSF Obligations	9.5
4. Operating Expenditure per FTE	8
5. State Appropriations per FTE	8
6. State Effort	7
7. Research Intensity	10
8. Average Faculty Salary	7
9. Library Volumes	6.5

TABLE 2

	Doctorates Awarded by Public Universities in Biological and Physical Sciences, and Engineering, 1979-80[a]		NSF Obligations to State Universities and Colleges, 1979-80	
	(1)		(2)	
	Number	(Rank)	$ Value (mil.)	(Rank)
Texas	476	(1)	$24.6	(1)
N. Carolina	249	(2)	13.6	(3)
Virginia	161	(4)	9.0	(5)
Florida	172	(3)	17.4	(2)
Georgia	119	(6)	9.2	(4)
Tennessee	129	(5)	4.9	(6)
Kentucky	60	(9.5)	2.7	(8)
Louisiana	71	(8)	2.4	(9.5)
S. Carolina	73	(7)	4.1	(7)
Alabama	60	(9.5)	2.4	(9.5)
Mississippi	42	(11)	1.3	(11)

[a]Southern Regional Education Board, Fact Book on Higher Education in the South, 1982.

ter are in parentheses. Louisiana, with total expenditures per FTE of $6396 in its major doctoral institutions (including medical schools), ranked eighth among the eleven educational systems. Louisiana ranked last among the six states of Column 2 of this table, which shows the non-medical CFE per FTE among institutions reporting medical schools separately.

Column 3 of Table 3 shows the level of state dedication to the operation of higher educational systems. In 1981-1982 Louisiana spent 1.14 percent of its personal income on public higher education, ranking seventh among these eleven Southern states. Column 4 of Table 3 shows the percent of operating expenses which are devoted to research activity. Louisiana, with 14 percent, was next to South Carolina at the bottom of the list.

Table 4 shows state Educational and General (E & G) operating appropriations per FTE in major public doctoral institutions from 1977 to 1983. Louisiana ranked eighth in 1981-82. Although the state was near the top in the percentage of increase in appropriations per FTE over the entire five-year period (Column 5), it was next to last in the 1979 to 1983 period (Column 6). Louisiana and Virginia were the only states with a reduction in appropriations per FTE between the 1981 and 1982 school years.

Column 1 of Table 5 shows the average 1981-82 9-month salary of faculty in public doctoral institutions. Louisiana ranked seventh out of ten, since North Carolina did not report. Previous years have shown North Carolina to have higher salaries than Louisiana. Therefore, Louisiana probably ranked eighth among all eleven states. The average in Column 1 will be partially affected by the mix of various ranks within the state institutions. Column 2 shows average nine-month salaries for full professors at each state's university. Louisiana ranked fifth in these salaries.

The qualities of each major state university library are represented in Columns 3 and 4 in Table 5. Library volumes at *LSU-BR* were 1.95 million in 1981-82, ranking along with the University of South Carolina for sixth place among Southern states. The University's volume was 40 percent of the volume at the University of Texas. The overall Association of Research Library index of library quality, Column 4, placed *LSU-BR* sixth among the major Southern state university libraries.

The following list briefly summarizes Louisiana's higher education ranking among eleven Southern states. A general impression would place Louisiana around eighth given the nine measures shown. Ranking below Louisiana would be Mississippi, Alabama, and South Carolina. One can certainly quibble about the perfection of each measuring instrument, yet the measures are all fairly consistent.

One interpretation of these results is that Louisiana gets what it pays for. Its resources devoted to higher education rank around eighth and its quality of output also ranks

TABLE 3

	Total Educational and General Expenditures Per FTE in Major Doctoral Institutions, 1979[a]			State Operating Expenditures For Public Higher Education as a Percent of State Personal Income, 1981-82[b]		Research Operating Expenditure as % of Total Operating E&G for Major Doctoral Public Institutions, 1979	
	(1) Medical Schools Included	(Rank)	(2) Medical Schools Excluded	(3) Percent	(Rank)	(4) Percent	(Rank)
Texas	$7067	(5)	$5237	1.25%	(11)	19%	(5)
N. Carolina	8808	(1)	—	1.49	(3)	19	(5)
Virginia	7044	(6)	—	.98	(9)		(7)
Florida	5836	(11)	—	.82	(10)	20	(2.5)
Georgia	7025	(7)	6347	1.02	(8)	26	(1)
Tennessee	5896	(10)	4792	.91	(11)	15	(9)
Kentucky	7863	(2)	—	1.15	(6)	19	(5)
Louisiana	6396	(8)	3748	1.14	(7)	24	(*10*)
	(6329)[c]		(3775)[c]				
S. Carolina	7286	(4)	5890	1.44	(2)	13	(11)
Alabama	7386	(3)	—	1.30	(4)	16	(7)
Mississippi	6290	(9)	5521	1.64	(1)	20	(2.5)

[a]National Center for Educational Statistics, Financial Statistics of Institutions of Higher Education, 1979.
[b]SREB.
[c]The figure in parentheses includes the Paul M. Hebert Law Center.

around eighth. In order to compete with other Southern states for high-technology industries it will have to improve its educational ranking among these states. Assuming a 1979 FTE enrollment of 25,000 at *LSU-BR*, Table 3, Column 2, shows that an increased annual operating expense of $65 million to the University would have been necessary in 1979 to raise Louisiana's expenditures per FTE ($3,748) to a level equivalent with Georgia *(6,347)*.

Assuming 1982-1983 enrollments at $LSU-BR$ to have been 30,000, Table 4, Column 1 shows increased annual state appropriations of $46 million to *LSU-BR* would have been necessary to raise Louisiana's state appropriations per FTE ($2,658) to a level equivalent with that of Georgia ($4,190). It could, of course, be many years before Louisiana received a return on such an investment. **The alternative, however, is to remain an eighth-ranked Southern state and hope that a quality academic system will not be essential for survival in the next several decades.**

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TABLE 4

State Educational and General Operating Appropriations Per FTE in Major Public Doctoral Institutions by Year

	(1)	(2)		(3)	(4)	% Change (5)	% Change (6)
	1982-83	1981-82	(Rank)	1979-80	1977-78	1977-78 to 1982-83	1979-80 to 1982-83
Texas	$4139	$3645	(4)	$3074	$2740	51%	35%
N. Carolina	4022	4010	(2)	n.a.	2819	53	—
Virginia	3132	3256	(6)	2789	2475	27	12
Florida	4146	3864	(3)	2855	2636	57	45
Georgia	4190	4050	(1)	3313	3042	38	26
Tennessee	3031	2731	(9)	2360	1822	66	28
Kentucky	3366	2704	(10)	2479	2228	51	36
Louisiana	2658	2752	(8)	2273	1714	55	17
S. Carolina	n.a.	3575	(5)	3309	2721	—	—
Alabama	2627	2462	(11)	2226	2090	28	18
Mississippi	n.a.	2934	(7)	n.a.	n.a.	—	—

TABLE 5

	Average Faculty 9-month Salaries in Public Doctoral Institutions, 1982-83[a]		**Average Full Professor 9-month Salary at Major State Universities, 1981-82[b]**		**Library Volumes at the Major State Universities 1981-82[c]**		**Rank of ARL Library Index at the Major State Universities, 1981-82[c]**
	(1)		(2)		(3)		(4)
	$ Value (thousands)	(Rank)	$ Value (thousands)	(Rank)	Volumes (millions)	Rank	Rank
Texas	$27.4	(4)	$38.7	(4)	4.85	(1)	1
N. Carolina	n.a.	—	41.5	(2)	2.84	(2)	2
Virginia	27.3	(5)	41.8	(1)	2.47	(3)	3
Florida	27.1	(6)	35.0	(8)	2.29	(4)	4
Georgia	28.9	(1)	39.0	(3)	2.14	(5)	5
Tennessee	23.0	(10)	30.6	(11)	1.42	(10)	9
Kentucky	27.5	(3)	35.2	(7)	1.85	(8)	7
Louisiana	25.9	(7)	36.8	(5)	1.95	(6.5)	6
S. Carolina	27.9	(2)	36.6	(6)	1.95	(6.5)	8
Alabama	24.4	(9)	32.7	(9.5)	1.47	(9)	10
Mississippi	25.2	(8)	32.7	(9.5)	n.a.	—	n.a.

[a]SREB, 1983.
[b]American Association of University Professors, Academe.
[c]Association of Research Libraries, 1982 Report.

Sean P. McGlynn

FORUM A Question of Excellence

Louisiana State University is the only university in the state, public or private, that is ranked as a Group I University by the Southern Region Education Board (SREB). Many other Southern states contain two or more universities of such rank—but not Louisiana, which, as stated, has only one. One might then expect that *LSU*, being one of a kind in Louisiana, would be well funded, thriving and in good financial shape. Such, unfortunately, is not the case. Indeed, of the twenty-three Group I Southern universities, *LSU* ranks seventeenth in state expenditures per student. This gruesome statistic says a great deal about the way *LSU* and higher education generally fare in Louisiana. But...the story gets worse: *LSU*, it turns out, is funded at a level of $20 million per annum less than the average of the twenty-three Group I Southern universities and $40 million lower than the leader of that group. And *LSU*, remember, is our comprehensive university, our research showcase, our premier institution of higher education.

Louisiana, in recent years anyway, has been spending a good deal of money on education. In 1980, for example, this state ranked 64 percent in total expenditure, 54 percent in per capita expenditure, and 60 percent in real expenditure for education. In other words, Louisiana occupies a nice average niche. This of course poses a number of questions: Why is *LSU* faring so badly? Why does the whole graduate education apparatus of Louisiana lack quality? Why are there so many accreditation problems? The answer lies in a maldistribution of monies, or politics if you will; in an inability to make hard choices; in a failure of nerve; and in a preference for sins of omission, rather than commission.

Now let us enquire into the effects of the impoverishment of the higher educational apparatus. We will do this by example and, for brevity, we will tackle only one issue, namely natural resource management. We choose the issue because Louisiana is rich in natural resources, ranking nationally, on a per-capita basis, at the 83-percent level in fisheries value, 96-percent level in mineral value, 64-percent in timberlands value, 80-percent in inland water revenues, and so on.

Yet, the number of Ph.D.s in natural sciences in Louisana ranks at the 8 percent level nationally, the number of American Fisheries Society members per volume of harvested fish ranks at the 4-percent level, and the number of limnologists and oceanographers ranks at a national 4-percent level. Is it any wonder that we have so much difficulty managing our national resources? This, of course, traces back to the means of producing such people: If the universities do not develop them, the specialists do not exist; and if the specialists do not exist, one must expect a steady progression from one natural resource crisis to the next.

All of this leads up to a few salient conclusions. They are presented here without much comment, but they are framed in the sparce prologue of the previous paragraphs:

1. Higher education in Louisiana is in a bad fix. This is true at both Masters and Doctorate levels but particularly so at the latter. Since research is prerequisite to doctoral-level studies, but only seldom so for masters-level studies, it also follows that research, particularly the scientific/technological variety, is in a very sad state.
2. The Louisiana approach to higher education is driven by populist attitudes. These attitudes have made the weaker colleges/universities a little better but, at the same time, they have made the good universities a good deal worse. That is, the level of mediocrity has increased and excellence has been debased.
3. Louisiana will never generate a truly excellent university until it adopts an elitist policy with respect to higher education. The populist attitude will never provide everyone a Rembrandt. Louisiana is not rich enough for that. And, besides, like Rembrandts, truly excellent unversities are very expensive propositions.
4. Soft (i.e., pass-through) monies will never beget excellence. Excellence requires stability, and stability requires hard money. Pass-through monies, in which some agency or group must function as a grantor of monies for specific projects, are too subject to political disbursement, and, while they can satisfy some immediate needs, the excellence they engender is too transient, too evanescent.
5. *LSU* is the single best hope for excellence in technological research that Louisiana possesses. If Louisiana is to develop a major research center at any time in the next decade, the best way to do it is to concentrate resources, and the best place for that concentration is where the greatest strengths exist. *LSU* is that place.
6. The making of an excellent university at *LSU* will require an increase of per annum expenditures by at least $35 million during the remainder of this decade. That is a lot of money and, no doubt, it will have to come from various sources. But, somehow, somewhere, a start must be made.

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IN APPRECIATION

The **Louisiana Business Review**, a quarterly publication of the Division of Research in the College of Business Administration at Louisiana State University, is dedicated to providing worthwhile and timely information on local, state and national economic developments of interest to members of the Louisiana business and government communities. This objective is being achieved by presenting high quality, readable articles written by knowledgeable representatives from business, government and academia. The Division would like to express its sincere appreciation to the following companies whose valuable contributions have made this publication possible.

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